ORAL ARGUMENT SCHEDULED FOR APRIL 10, 2008

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 07-1053

NATURAL RESOURCES DEFENSE COUNCIL
and LOUISIANA ENVIRONMENTAL ACTION NETWORK

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

On Petition for Review of Final Agency Action of the
United States Environmental Protection Agency

FINAL OPENING BRIEF OF PETITIONERS NATURAL RESOURCES DEFENSE COUNCIL AND LOUISIANA ENVIRONMENTAL ACTION NETWORK

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FILED: March 4, 2008

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FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, *et al.*, **Petitioners,**	)	
v.	)	**Case No. 07-1053**
ENVIRONMENTAL PROTECTION AGENCY, *et al.* **Respondents.**	)	

PETITIONERS' CERTIFICATE
AS TO PARTIES, RULINGS, AND RELATED CASES

In accordance with Fed. R. App. P. 26.1 and D.C. Circuit Rules 26.1 and 28(a)(1), Petitioners the Natural Resources Defense Council ("NRDC") and Louisiana Environmental Action Network ("LEAN") hereby certify as follows:

(A) Parties and *Amici*

(i) Parties, Intervenors, and *Amici* Who Appeared in the District Court

This case is a petition for review of final agency action. There were no proceedings in district court.

(ii) Parties to This Case

Petitioners are NRDC and LEAN. Respondent is the U.S. Environmental Protection Agency. Intervenor for Respondent is the American Chemistry Council.

(iii) Circuit Rule 26.1 Disclosures for Petitioners

(a) NRDC

NRDC has no parent companies, and no publicly held company has a 10% or greater ownership interest in NRDC. NRDC, a corporation organized and existing under the laws of the State of New York, is a national nonprofit organization dedicated to improving the quality of the human environment and protecting the nation's endangered resources.

(b) LEAN

LEAN has no parent companies, and no publicly held company has a 10% or greater ownership interest in LEAN. LEAN, a corporation organized and existing under the laws of the State of Louisiana, is a nonprofit organization dedicated to the creation and maintenance of a cleaner and healthier environment for all of the inhabitants of Louisiana.

(B) Rulings Under Review

The ruling under review is the final decision (including the failure to promulgate regulations) taken by Respondent at 71 Fed. Reg. 76,603 (Dec. 21, 2006) and entitled "National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry."

(C) Related Cases

Petitioners are not aware of any cases that are related to this matter.

DATED: March 4, 2008

Respectfully submitted,

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GLOSSARY

ACC	American Chemistry Council
CAA	Clean Air Act
CMPU	chemical manufacturing process units
EPA	U.S. Environmental Protection Agency
HAP	hazardous air pollutant
HON	hazardous organic NESHAP
JA	joint appendix
LAER	lowest achievable emission rate
LEAN	Louisiana Environmental Action Network
MACT	maximum achievable control technology
NRDC	Natural Resources Defense Council
NEI	National Emissions Inventory
NESHAP	National Emission Standards for Hazardous Air Pollutants
RRA	SOCMI Residual Risk Assessment (EPA-HQ-OAR-2005-0475-0108)
RRR	EPA's 1999 Residual Risk Report to Congress (http://www.epa.gov/ttn/oarpg/t3/reports/risk_rep.pdf)
RTC	EPA Response to Comments (EPA-HQ-OAR-2005-0475-0164)
SOCMI	synthetic organic chemical manufacturing industry
tpy	tons per year

JURISDICTIONAL STATEMENT

Petitioners filed for review of the challenged decision of Respondent U.S. Environmental Protection Agency ("EPA") – published in the *Federal Register* on December 21, 2006, 71 Fed. Reg. 76,603[JA084] – on February 20, 2007, within the statutory 60-day period. The Court thus has jurisdiction to review EPA's decision. 42 U.S.C. §7607(b)(1).

STATUTES AND REGULATIONS

Pertinent statutory sections appear in an addendum to this brief.

STATEMENT OF ISSUES

1. Section 112(f)(2)(A) of the Clean Air Act ("CAA" or "Act") specifies that with respect to any pollutant "classified as a known, probable or possible human carcinogen," emission standards must reduce lifetime excess cancer risks "to less than one in one million." 42 U.S.C. §7412(f)(2)(A). Did EPA contravene the statute and act arbitrarily and capriciously when it deemed "acceptable" lifetime excess cancer risks associated with organic hazardous air pollutants ("HAPs") that exceed 1-in-1 million?

2. For stationary sources of organic HAPs, CAA §112(f)(2)(A) directs EPA to "promulgate standards . . . if promulgation of such standards is required in order to provide an ample margin of safety to protect public health . . . or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an

adverse environmental effect." *Id.* §7412(f)(2)(A). Did EPA contravene the statute and act arbitrarily and capriciously by considering cost in its assessment of whether emissions standards for organic HAPs provide an ample margin of safety to protect public health?

3. Under CAA §112(d)(3), EPA standards for HAPs must "not be less stringent" than statutory floors, determined by the "best controlled similar source" for new major sources, and the "best performing 12 percent" for most existing major sources. *Id.* §7412(d)(3). Section 112(d)(6) requires EPA to "review, and revise as necessary" these standards every 8 years. *Id.* §7412(d)(6). Was it unlawful, arbitrary, and capricious for EPA to conduct this review without determining whether the standards are less stringent than the statutory floors?

4. EPA's final action was premised on an assessment of the health risks associated with emissions of organic HAPs. Did EPA act arbitrarily and capriciously when it based its final action on a risk assessment that was overly narrow and developed using incomplete, unverified and unrepresentative data?

STATEMENT OF THE CASE

Petitioners challenge EPA's final decision governing review and revision of national emission standards for HAPs emitted from 238 synthetic organic chemical manufacturing industry ("SOCMI") facilities nationwide. 71 Fed. Reg.

76,607/1[JA088]. The challenged decision fails to strengthen standards applicable to the emission of organic or inorganic HAPs from SOCMI facilities.

SOCMI processes release 131 organic HAPs, including benzene, toluene, and formaldehyde, as well as numerous inorganic HAPs, such as hydrochloric acid and chlorine. *See* SOCMI Residual Risk Assessment (EPA-HQ-OAR-2005-0475-0108) (hereinafter "Risk Assessment" or "RRA") 1-4, 3-2 to 3-4[JA138, JA148-50]. SOCMI facilities emit at least 56,386 tons of HAPs annually. *Id.* K-5[JA388].

The HAPs emitted from SOCMI facilities cause serious adverse health effects. 71 Fed. Reg. 34,424-25[JA061-62]. Among the 131 organic HAPs emitted by SOCMI facilities, 4 are known carcinogens, 33 are probable carcinogens, and 15 are possible carcinogens. *Id.* 34,424/3[JA061]. These HAPs also cause nervous system dysfunction, developmental toxicity, and skin, eye, and respiratory irritation. *Id.* 34,425/1[JA062].

STATEMENT OF FACTS

I. STATUTORY BACKGROUND

When amending the CAA in 1990, Congress noted that "[v]ery little ha[d] been done since the passage of the 1970 Act to identify and control hazardous air pollutants." S. REP. NO. 101-228, at 3 (1989), 5 LEGIS. HIST. 8343. In fact, in the first nineteen years following passage of the Act, "just eight substances ha[d] been

listed as hazardous air pollutants" and "NESHAPs (National Emission Standards for Hazardous Air Pollutants) ha[d] been promulgated for sources of only seven of these pollutants." *Id.*

Acknowledging that the 1970 Act's approach to HAPs "worked poorly," Congress reached a "broad consensus that the program to regulate hazardous air pollutants under section 112 of the Clean Air Act should be restructured to provide EPA with authority to regulate industrial and area source categories of air pollution (rather than the pollutants) with technology-based standards in the near term." *Id.*; *see also Nat'l Lime Ass'n v. EPA*, 233 F.3d 625, 633 (D.C. Cir. 2000).

The 1990 Amendments made fundamental changes in the basic provisions of section 112 of the Act. First, Congress listed more than 180 HAPs and a mandatory schedule by which EPA was to issue emissions standards for the major sources of these pollutants. 42 U.S.C. §§7412(b)(1), (e). Congress mandated that "[t]he standards are to be based on the maximum reduction in emissions which can be achieved by application of best available control technology," or "MACT," and emphasized that "[t]hese new, technology-based standards will become the principal focus of activity under section 112." S. REP. NO. 101-228, at 133, 5 LEGIS. HIST. 8473.

Section 112(d)(2) requires EPA to set emission standards that reflect the "maximum degree of reduction in emissions." 42 U.S.C. §7412(d)(2). For new

major sources, "the maximum degree of reduction in emissions" "shall not be less stringent" than the "best controlled similar source." *Id.* §7412(d)(3). For existing sources, standards "shall not be less stringent" than the "average emission limitation achieved by the best performing 12 percent of the existing sources...." *Id.* §7412(d)(3). Thus, MACT standards must be exclusively technology-based, and EPA may not consider cost or risk. *NRDC v. EPA*, 489 F.3d 1364, 1376 (D.C. Cir. 2007).

By mandating minimum technology requirements and dictating that the emissions standard must be at least that stringent, §112(d)(3) effectively functions as a "floor." Congress authorized EPA to set standards more stringent than the "floor." When setting "above-the-floor" controls, EPA may consider "the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements." 42 U.S.C. §7412(d)(2). Congress directed EPA to review the MACT standards every eight years and revise them as necessary taking into account "developments in practices, processes, and control technologies." *Id.* §7412(d)(6).

Recognizing that "[i]t may be that the MACT technology-based standards will not reduce emissions sufficiently to remove all risks to health and environment of concern," Congress directed EPA "to tighten the standards 8 years after the initial MACT standard is promulgated" where "significant risks" remain. Senate

Debate on S. 1630 (Oct. 27, 1990) (Sen. Durenberger), 1 LEGIS. HIST. 863. Section 112(f) directs EPA to report to Congress by 1996 on the methods of calculating the remaining risk after application of MACT standards, the public health significance of estimating the remaining risk, the actual health effects to those living in the vicinity of sources, and recommendations regarding the remaining risk.[1] 42 U.S.C. §7412(f)(1).

Under §112(f)(2), if Congress failed to act on EPA's residual risk report recommendations (Congress did fail to act), then EPA must, eight years after it issues §112(d) MACT standards for a source, promulgate health-based standards where necessary to "provide an ample margin of safety for public health" or to "prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect." *Id.* §7412(f)(2). Section 112(f)(2)(A) specifically requires that if, upon completion of the 8-year review, the existing MACT standards for a carcinogenic pollutant do not reduce lifetime cancer risks to less than 1-in-1 million, then EPA "shall promulgate standards" under §112(f) for sources emitting that pollutant. *Id.* §7412(f)(2)(A).

[1] EPA issued the 1996 report required by §112(f)(1) in March 1999. *See generally* Residual Risk Report to Congress (available at http://www.epa.gov/ttn/oarpg/t3/reports/risk_rep.pdf) (hereinafter "Residual Risk Report" or "RRR").

II. REGULATORY BACKGROUND

A. Hazardous Organic NESHAP ("HON")

In 1994, EPA adopted a §112(d)(3) national emissions standard for hazardous air pollutants ("NESHAP") for SOCMI facilities. 59 Fed. Reg. 19,402 (Apr. 22, 1994). This rule is commonly called the "hazardous organic NESHAP" or "HON." 71 Fed. Reg. 34,422/1[JA059]. The HON applies to "chemical manufacturing process units" or CMPUs, which are assemblages of connected equipment used to process raw materials and to manufacture organic chemical products. *Id.* 34,424[JA061]. There may be several CMPUs at a SOCMI facility; for the original HON rulemaking, EPA estimated there were 729 CMPUs at 238 SOCMI facilities nationwide. *Id.*

In the HON rule, EPA elected to regulate only organic HAP emissions, and only from 5 types of CMPU emission points: "storage vessels, process vents, wastewater collection and treatment operations, transfer operations, and equipment leaks." *Id.* 34,425[JA062]. For all of these emission points except equipment leaks, the HON establishes applicability criteria – generally based on equipment size or capacity – to distinguish between Group 1 and Group 2 emission points.

The rule requires emissions standards only for Group 1 emission points; Group 2 emission points are subject to recordkeeping requirements only. *Id.*[2]

B. Review of HON Pursuant to CAA §§112(d)(6) and 112(f)(2)

To fulfill the Act's requirement that EPA review the MACT standards and revise them as necessary every eight years and also to review the emission standards to determine whether they provide an ample margin of safety every eight years, EPA issued a proposed revision of the HON on June 14, 2006. 71 Fed. Reg. 34,422[JA059]. EPA issued its final decision – adopting no changes to the HON – six months later. 71 Fed. Reg. 76,603[JA084] (Dec. 21, 2006).

1. Review of Residual Risk Under §112(f)(2).

EPA conducted a risk assessment to analyze the residual risks from the SOCMI after implementation of the HON. EPA did not exercise its CAA §114 information collection authority to gather information for the risk assessment.[3]

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[2] The HON's failure to regulate all HAP emissions from CMPUs is at odds with decisions by this Court issued after promulgation of the rule in 1994. This Court has ruled repeatedly that EPA has a "clear statutory obligation to set emission standards for each listed HAP." *Nat'l Lime Ass'n*, 233 F.3d at 634; *Sierra Club v. EPA*, 479 F.3d 875, 878, 883 (D.C. Cir. 2007). The Court has ruled further that this obligation does not allow EPA simply to avoid setting emissions standards at all, sometimes called "no-control" floors, for emissions points emitting listed HAPs. *Sierra Club*, 479 F.3d at 883. By failing to establish emission standards for listed *inorganic* HAP from CMPUs, and failing to mandate standards for emissions points of all listed HAP not meeting Group 1 criteria (*e.g.*, Group 2 emission points and other CMPU emission points), the HON as written is inconsistent with this Court's caselaw.

[3] Pursuant to CAA §114 EPA possesses broad, general authority to require SOCMI facilities to sample, monitor and report HAP emissions; to submit production and control equipment information; and to provide "such other information as the Administrator may reasonably require" "[f]or the purpose of . . . developing or assisting in the development of . . . any emission standard under section [112]. . . ." 42 U.S.C. §7414(a).

Rather, the American Chemistry Council ("ACC"), the industry trade organization, collected the data and provided it to EPA. RRA 1-4. The data were collected via questionnaires prepared by ACC, distributed to its members, and returned on a voluntary basis. 71 Fed. Reg. 76,606/3[JA087].

The ACC questionnaire solicited organic HAP emissions data for the five currently regulated HON emissions points (process vents, transfer racks, equipment leaks, storage vessels, and wastewater) but did not request data on organic HAPs emitted from unregulated equipment, inorganic HAPs, allowable (versus) actual emissions, or emissions from nonroutine operations. RRA 5-9 & App. D[JA179, JA313]. Indeed, before or after the proposal, EPA itself did not require SOCMI operators to submit emissions data, human exposure information, equipment specifications, or any other source-specific information about SOCMI facilities.

A majority of SOCMI facilities (134 of 238) did not respond to ACC's questionnaire. 71 Fed. Reg. 34,429/2[JA066]. When facilities did respond, the responses were often incomplete, RRA 5-18 to 5-19[JA188-89], and in most cases EPA could not verify that reported emissions were estimated using established methodologies. *Id.* 5-9[JA179]. Despite the poor response rate, EPA also assumed that emissions from the 104 facilities in the survey were representative of, and proportional to, emissions from the remaining 134 facilities. 71 Fed. Reg.

76,607/1[JA088]. This assumption was made despite EPA's finding that "the emissions data obtained through the industry questionnaire cannot be proven to be proportional to the emissions from the entire source category." *Id.*

EPA's §112(f)(2) residual risk review recognized that SOCMI facilities emit carcinogens and identified that the most exposed individuals were exposed to a lifetime excess cancer risk of 100-in-1 million. *Id.* 34,424-25 & 34,431[JA061-62, JA068]. Yet, instead of promulgating a health-based standard to meet the 1-in-1 million cancer risk level §112(f)(2) requires, *see* 42 U.S.C. § 7412(f)(2)(A), EPA determined the risk of 100-in-1 million to be "acceptable" and decided that the current HON rule "protects public health with an ample margin of safety."[4] 71 Fed. Reg. 76,605/1[JA086]. As a result, EPA estimates that 2 million Americans will face lifetime cancer risks exceeding 1-in-1 million from HON equipment at SOCMI facilities. *Id.* 34,431 Tbl.1[JA068].

[4] EPA justified its departure from §112(f)(2)'s health-based standard of "one in one million" by asserting that its decision-making was authorized by a "two-step determination of acceptable risk and ample margin of safety" developed by the agency in its 1989 Benzene NESHAP rule. 71 Fed. Reg. 34,428/2[JA065] (citing 54 Fed. Reg. 38,044 (Sept. 14, 1989)); *see also* discussion *infra* Section II.B.2. Under the Benzene NESHAP approach, EPA first determines the "acceptability of risk" based on several factors, including numbers of exposed persons, estimates of quantitative risk, and weight of the evidence. 71 Fed. Reg. 76,607/3[JA088]. EPA next determines an ample margin of safety, taking into account "technical feasibility, cost, economic impact, and other factors." *Id.* In practice, EPA applies this test to approve levels of cancer risk far above 1-in-1 million, including acknowledged risk at 100-in-1 million here, *id.* 76,605/1[JA086], and as high as 270-in-1 million in other instances. *See generally* 70 Fed. Reg. 19,992[JA023] (Apr. 15, 2005) (coke oven batteries final residual risk rule).

2. Review of MACT Standards Under §112(d)(6).

EPA asserted in its HON revision proposal that the MACT standards review mandated by §112(d)(6) does not "requir[e] another analysis of MACT floors for existing and new sources." *Id.* 34,436/3[JA073]. Instead, EPA claimed that the results of the residual risk review would determine the extent of the review of the MACT standards. *Id.* 34,437/2-3[JA074]. In its final decision, EPA failed to determine the applicable MACT floors and adopted no additional standards. *Id.* 76,605-06[JA086-87].

SUMMARY OF ARGUMENT

Petitioners challenge EPA's failure to promulgate health-based standards for emissions of HAPs – including carcinogens – from SOCMI facilities that present a 100-in-1 million maximum lifetime excess cancer risk despite Congress's mandate that EPA promulgate health-based standards where such a source presents a cancer risk greater than 1-in-1 million. EPA also contravened the CAA by using cost as a consideration in its assessment of whether emissions standards for SOCMI facilities provide an ample margin of safety to protect public health, because Congress only directed EPA to consider costs when setting standards to prevent an adverse environmental effect.

Petitioners further challenge EPA's noncompliance with Congressional limitations on agency discretion that require technology-based "floors," beneath

which EPA may not set emission standards. It is well-settled that "EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion." *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 485 (2001).

Finally, EPA acted arbitrarily and capriciously in basing its final decision on a risk assessment that was overly narrow in scope and developed using admittedly incomplete, unverified and unrepresentative data.

STANDING

Petitioners NRDC and LEAN have standing to challenge EPA's failure to regulate harmful air emissions from SOCMI facilities on behalf of their members. *See Friends of the Earth v. Laidlaw Envtl. Servs.*, 528 U.S. 167, 180-81 (2000); *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 343 (1987). Petitioners' core missions include combating excess air pollution and the resulting health and environmental harms, and advocating for stronger measures to protect and enhance air quality. *See* Mary Lee Orr Decl. ¶¶3-4 (LEAN organizational interest); Linda Lopez Decl. ¶4 (NRDC organizational interest) (standing declarations appear in Addendum B to this brief).

The challenged EPA decision directly harms Petitioners' members. Petitioners' members live, work, and recreate in communities near polluting SOCMI facilities, including clusters of multiple SOCMI plants, for which EPA

refused to adopt emission standards. *See* Decls. of R. David Brown ¶¶2-4; Nancy Coslar ¶¶2-3; Tom Coslar ¶¶2-3; Elizabeth Embrey ¶3; Gary Miller ¶¶3-4; Bob Philp, Jr. ¶4; Florence T. Robinson ¶¶2-3; Marsha Svatapolsky ¶¶2-3. EPA concedes these plants are responsible for lifetime increased cancer risks as high as 40-in-1 million in cities where these members live. RRA Tbl.6-1 & App. N[JA198-202, JA394]. Petitioners argue below that cancer risks are likely to be even higher than admitted by EPA, because of serious deficiencies in EPA's risk assessment that result in an underestimation of risk. *See infra* Argument Section IV. The challenged decisions therefore expose Petitioners' members to toxic pollution that these facilities emit and an acknowledged risk of serious health effects, including cancer, developmental harm, nervous system dysfunction, and respiratory illness. 71 Fed. Reg. 34,425/1[JA062]; *See* Decls. of Brown ¶4; N. Coslar ¶6; T. Coslar ¶¶3, 6; Embrey ¶8; Philp ¶11; Robinson ¶4; Svatapolsky ¶8. Petitioners' members have also altered their behavior and suffered diminished aesthetic and recreational enjoyment of their surroundings as a result of the risk of air pollution from these facilities. *See* Decls. of Brown ¶4; N. Coslar ¶¶4-5; T. Coslar ¶¶4-5; Embrey ¶¶6-7; Miller ¶7; Philp ¶¶6-9; Robinson ¶¶5-6; Svatapolsky ¶¶5-7.

These are cognizable aesthetic, recreational, and human health injuries. *See, e.g., Laidlaw Envtl. Servs.*, 528 U.S. at 183 ("[E]nvironmental plaintiffs adequately

allege injury in fact when they aver that they use the affected area and are persons 'for whom the aesthetic and recreational values of the area will be lessened' by the challenged activity."); *NRDC v. EPA*, 489 F.3d at 1370-71 (finding standing based on lessened recreational and aesthetic enjoyment, and overturning an EPA air toxics exemption based upon predicted lifetime cancer risks below 1-in-1 million); *NRDC v. EPA*, 464 F.3d 1, 6-7 (D.C. Cir. 2006) (increased lifetime risk of non-fatal skin cancer is sufficient to support standing). Petitioners' injury-in-fact is caused by EPA's unlawful action and will be redressed by a decision vacating EPA's action and ordering the agency to comply with the CAA on remand.

Petitioners may therefore sue on behalf of their members because (a) their members would have standing to sue in their own right, (b) neither the claims asserted nor the requested relief require proof of individualized damages, and therefore do not require the participation of individual members, and (c) the interests Petitioners seek to protect are germane to each organization's purposes. *Hunt*, 432 U.S. at 343; Orr Decl. ¶¶ 3-4; Lopez Decl. ¶4.

ARGUMENT

I. STANDARD OF REVIEW

Under CAA §307(d)(9)(A), this Court must reverse EPA actions found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 42 U.S.C. §7607(d)(9)(A). In evaluating Petitioners' claim that EPA's

failure to promulgate standards here justifies remand, the Court should follow the familiar *Chevron* standard, C*hevron U.S.A. v. NRDC*, 467 U.S. 837, 842-43 (1984). Under *Chevron* step one, the Court must "give[] effect" to congressional intent discerned using "traditional tools of statutory construction." *Id.* at 843 n.9. When "the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Id.* at 842-43. An agency receives "no deference" on this issue. *Cajun Elec. Power Coop. v. FERC*, 924 F.2d 1132, 1136 (D.C. Cir. 1991). Where Congress has failed to make its intent clear, *Chevron* step two provides for judicial deference to reasonable agency interpretations of the statute. *Chevron*, 467 U.S. at 845; *Rettig v. Pension Benefit Guar. Corp.*, 744 F.2d 133, 151 (D.C. Cir. 1984). Unless otherwise expressly indicated, references in this brief to "unlawful" agency action address both violation of Congressional intent under *Chevron* step one and unreasonable agency interpretation under step two.

An agency "must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal citation omitted). Agency action is arbitrary and capricious if, *inter alia*, "the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important

aspect of the problem, [or] offered an explanation for its decision that runs counter to the evidence before the agency." *Id.*

II. EPA'S FAILURE TO PROMULGATE RESIDUAL RISK STANDARDS FOR THE HON SOURCE CATEGORY VIOLATES THE PLAIN LANGUAGE OF THE CLEAN AIR ACT.

EPA violated the plain language of the Act by failing to promulgate residual risk emission standards. EPA must promulgate standards under §112(f)(2) when the risks of exposure to a known, probable, or possible human carcinogen exceed 1-in-1 million. 42 U.S.C. §7412(f)(2)(A). EPA unlawfully refused to promulgate such standards despite acknowledging that risks greatly exceed the statutory limit.

A. EPA Unlawfully Failed to Promulgate Emission Standards for Carcinogens Despite Excess Lifetime Cancer Risks Greater Than 1-in-1 Million.

Section 112(f) compels EPA to regulate major sources of HAP to address residual risks remaining 8 years after application of the standards imposed under §112(d). *Id.* §7412(f). Section 112(f)(2)(A) requires that if, upon completion of the 8-year review, the existing MACT standards for a carcinogenic pollutant do not reduce lifetime cancer risks to less than 1-in-1 million, then EPA "shall promulgate standards" under §112(f) for sources emitting that pollutant. *Id.* §7412(f)(2)(A).

EPA concedes that lifetime cancer risks to the maximum exposed individual from exposure to organic HAPs under the HON exceed 1-in-1 million. *See* 71 Fed. Reg. 76,605[JA086]. Indeed, EPA concedes the maximum cancer risk to be 100-

in-1 million.[5] *Id.* EPA nevertheless refused to promulgate residual risk standards. *Id.* 76,603[JA084] (stating EPA's decision "not to revise the existing standards based on the residual risk" review). This decision violates the plain statutory language, and the Court should remand this action to the agency to promulgate lawful standards.

B. EPA's Interpretation of §112 Contravenes the Statutory Text.

EPA argues that it need not promulgate residual risk standards for several reasons. Each of these arguments contravenes the statute and fails to provide the "extraordinarily convincing justification" necessary to depart from the Act's plain language. *See Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1041 (D.C. Cir. 2001).

1. Cancer Risk Greater than 1-in-1 Million Compels EPA Regulation to Below that Level of Risk and Is Not a Mere "Trigger" for Further Evaluation.

Plain statutory language compels the conclusion that EPA must adopt more stringent standards when remaining cancer risk exceeds 1-in-1 million, and that such standards must reduce risk to below 1-in-1 million. EPA, however, interprets the statutory mandate "shall promulgate standards" to permit no action at all where EPA concludes the absence of regulation will pose "acceptable" risks greater than 1-in-1 million. 71 Fed. Reg. 76,605[JA086]; EPA Response to Comments

[5] As discussed below, EPA's risk assessment is arbitrary and likely to significantly underestimate cancer risk. *See infra* Section IV.

(hereinafter "RTC") 14[JA519] ("EPA believes it is also reasonable to read CAA section 112(f)(2)(A) as *not requiring an affirmative revision of existing regulations* in cases such as the HON where, through rulemaking, the agency determines that those standards already meet the benzene NESHAP test.") (emphasis added). In other words, according to EPA, "shall promulgate standards" means "need not promulgate standards" where EPA has chosen to substitute its preferred risk level (greater than 1-in-1 million) for that directed by Congress. This argument turns the plain statutory language on its head and renders meaningless the 1-in-1 million Congressional threshold requiring EPA to set standards.

EPA further argues that Congress intended a 1-in-1 million risk of cancer to be merely a statutory "trigger" for further "evaluat[ion]," not regulation. 71 Fed. Reg. 76,607/3[JA088]. ("[W]e do not consider the 1-in-1 million individual cancer risk level as a 'bright line' mandated level of protection for establishing residual risk standards, but rather as a trigger point to evaluate whether additional reductions are necessary to provide an ample margin of safety to protect public health."). Under this reading, however, the 1-in-1 million language is mere surplusage, because the statutory provision already contains such a trigger that requires evaluation of all HAPs and the promulgation of standards to ensure protection with an ample margin of safety.

The first sentence of §112(f)(2)(A) specifically directs EPA to evaluate residual risks within 8 years of adoption of all MACT standards, to determine whether additional reductions are necessary "to provide an ample margin of safety to protect public health." If the 1-in-1 million language in the third sentence of §112(f)(2)(A) does no more than require EPA "to evaluate whether additional reductions are necessary to provide an ample margin of safety," as EPA asserts, 71 Fed. Reg. 76,607/3[JA088], then it is entirely duplicative and unnecessary. This contravenes basic canons of statutory interpretation. *See Gustafson v. Alloyd Co.*, 513 U.S. 561, 574 (1995) ("[T]he court will avoid a reading which renders some words altogether redundant."); *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001) ("It is 'a cardinal principle of statutory construction' that 'a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant.'") (quoting *Duncan v. Walker*, 533 U.S. 167, 174 (2001)). EPA's "double trigger" theory is illogical and has no basis in the text.[6]

Furthermore, EPA's interpretation ignores the statute's more stringent treatment of sources of carcinogens. The first sentence of §112(f)(2)(A) compels EPA to promulgate standards if required to provide an ample margin of safety to

[6] EPA's interpretation of the 1-in-1 million standard as only a "trigger" requiring "evaluation" of possible risk reductions traps the agency in an infinite loop – the trigger for evaluation would remain if EPA does not promulgate residual risk standards, because the cancer risk would perpetually remain above 1-in-1 million.

protect public health and to prevent adverse environmental effects. 42 U.S.C. §7412(f)(2)(A). This broad directive applies to all MACT sources and to human as well as environmental impacts. Moreover, this general provision specifically leaves in the Administrator's hands the discretion to determine "if promulgation of such standards is required in order to provide an ample margin of safety." *Id.* The third sentence of §112(f)(2)(A), however, which is most relevant here, states that if a source emits a "known, probable or possible carcinogen," and if existing standards do not reduce lifetime excess cancer risks for the most exposed individual to "less than one in one million," EPA "*shall promulgate* standards under this subsection." *Id.* (emphasis added). This differs from the general residual risk directive in three important respects.

First, it focuses more narrowly on just known, probable, and possible carcinogens – making clear that Congress intended here to target these particular HAPs for specialized treatment. Second, this sentence focuses solely on human health impacts – it does not address environmental effects. Third, with respect to the human health-related impacts from known, probable, and possible carcinogens, this provision withdraws the discretion otherwise entrusted to the Administrator under the first sentence of §112(f)(2)(A) to determine "*if* promulgation of such standards is required in order to provide an ample margin of safety." *Id.* (emphasis added). Instead, Congress itself makes that core determination, identifying the

"ample margin of safety" threshold as a risk level of 1-in-1 million, and orders that EPA "*shall* promulgate standards" if that level is exceeded. *Id.* (emphasis added). Congress expressly limited EPA's judgment to determine ample margin of safety; if a source emits carcinogens, the ample margin of safety is no greater than 1-in-1 million lifetime risk.[7]

Courts have consistently ruled that more specific language in a statute governs more general language. *Nat'l Cable & Telecomms. Ass'n, Inc. v. Gulf Power Co.*, 534 U.S. 327, 335-36 (2002) (noting that "specific statutory language should control more general language when there is a conflict between the two ... but only within its self-described scope"); *D. Ginsberg & Sons v. Popkin*, 285 U.S. 204, 208 (1932) ("General language of a statutory provision, although broad enough to include it, will not be held to apply to a matter specifically dealt with in another part of the same enactment. Specific terms prevail over the general in the same or another statute which otherwise might be controlling.") (citations omitted). Congress would not have added such a specific standard to compel regulation of cancer risk – 1-in-1 million – if that language could be trumped by a more general "ample margin of safety" requirement. The only tenable reading is that 1-in-1

[7] The second sentence of §112(f)(2)(A) identifies the general obligation that standards promulgated under this subsection must provide an ample margin of safety to protect public health and the environment. 42 U.S.C. § 7412(f)(2)(A). This does not alter or weaken the specific risk level for carcinogens: 1-in-1 million.

million defines the ample margin of safety necessary for specific HAPs: known, probable or possible carcinogens.

This is consistent with Congress's pattern of regulating carcinogens more stringently under §112 of the Act. In §112(c)(9)(B)(i), Congress provides that the Administrator may delete a source category from the regulatory §112 list (required under §112(c)) only upon a finding that no source in the category causes cancer risk to the most exposed individual greater than 1-in-1 million. *See* 42 U.S.C. §7412(c)(9)(B)(i). It is significant that this higher standard for delisting is also 1-in-1 million, demonstrating consistent Congressional use of this protective cancer risk level. Moreover, this Court previously noted – citing §112(f)(2)(A) in particular – that Congress consistently imposes tighter restrictions on carcinogenic HAPs in the CAA. *NRDC v. EPA*, 489 F.3d at 1373 ("[B]ecause subsection 112(c)(9) involves carcinogens, limiting delistings to source 'categories,' as distinct from 'subcategories,' accords with Congress's tighter restrictions on carcinogenic HAPs. *See, e.g.*, 42 U.S.C. § 7412(f)(2)(A)."). EPA's reading of §112(f)(2)(A), however, would disregard Congress's more specific and more stringent treatment of carcinogenic HAPs in this subsection, treating carcinogens no differently than non-carcinogens or environmental effects. This interpretation must be rejected.

This is confirmed in the legislative history. Congressman Waxman explained:

> With regard to carcinogens, section 112(f)(2)(A) specifically defines the crucial phrase "an ample margin of safety to protect the public health." ... [I]f a section 112(d) standard does not reduce the lifetime cancer risk to the individual most exposed to emissions from that facility to less than one in one million, the "ample margin of safety" standard is not met, and the Administrator must promulgate residual risk emission standards under section 112.

Rep. Henry A. Waxman, *An Overview of the Clean Air Act Amendments of 1990*, 21 ENVTL. L. 1721, 1779 (1991) (cited as legislative history in *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882, 886 (D.C. Cir. 2006)) (hereinafter "Waxman Overview"). Congress made a special rule "[f]or carcinogens, [specifically directing] EPA... to promulgate standards if the person most exposed to emissions from a source faces a risk exceeding 1 in 1,000,000." Senate Debate on S. 1630 (Oct. 27, 1990) (Sen. Durenberger), 1 LEGIS. HIST. 863.[8]

[8] EPA points to Congressional inaction in response to the agency's Residual Risk Report to argue that Congress accepted the agency's view that 1-in-1 million increased cancer risk is not a "bright line" requiring regulation. 71 Fed. Reg. 76,607-08[JA088-89]. First, Congressional inaction in 1999 is a meaningless indication of Congressional intent in 1990, especially in the face of plain statutory language contrary to EPA's position. *See, e.g., Solid Waste Agency of N. Cook County v. U.S. Army Corps of Eng'rs.*, 531 U.S. 159, 170 (2001) (relationship between the inaction of a subsequent Congress and the intent of a previous Congress is "considerably attenuated"); *Northern Colorado Water Conservancy Dist. v. FERC*, 730 F.2d 1509, 1520 (D.C. Cir. 1984) (rejecting agency argument that by not amending the statute after being put on notice of agency's interpretation, Congress acquiesced in that interpretation). Second, as this Court has held, "we do not see how merely applying an unreasonable statutory interpretation for several years can transform it into a reasonable interpretation." *F.J. Vollmer Co. v. Magaw*, 102 F.3d 591, 598 (D.C. Cir. 1996).

EPA's final argument to avoid the 1-in-1 million obligation is that Congress considered but did not adopt legislative language that would have "mandated elimination of lifetime risks of carcinogenic effects greater than 1-in-10 thousand" to the most exposed individual. 71 Fed. Reg. 76,608/1[JA089]. According to EPA, this "shows that Congress considered mandating a level of risk reduction and chose not to do so." *Id.* EPA's argument is an attempt to divert attention from the specific risk level that Congress did adopt. Courts appropriately decline to place much stock in unadopted amendments, because of the vagaries of the legislative process and the multiple reasons why amendments fail. *U.S. v. Wise*, 370 U.S. 405, 411 (1962) ("Logically, several equally tenable inferences could be drawn from the failure of the Congress to adopt an amendment in the light of the interpretation placed upon the existing law by some of its members, including the inference that the existing legislation already incorporated the offered change."). EPA reads too much into this selective snippet of legislative history; it is equally likely that this signals legislative debate over the precise level of risk reduction to mandate, not whether to mandate risk reduction at all.

2. EPA's Reliance on the 1989 Benzene NESHAP Rule to Unravel the Plain Statutory Language Is Unlawful.

In support of its position that "shall promulgate" means "need not promulgate," EPA claims that Congress directed the agency to follow EPA's 1989 Benzene NESHAP approach rather than comply with the 1-in-1 million risk

standard in the law. As summarized *supra* in the Regulatory Background Section, EPA follows the Benzene NESHAP approach to make a subjective determination about "acceptability of risk" based on multiple factors, in order to arrive at an "ample margin of safety." 71 Fed. Reg. 76,607/3[JA088]. EPA relies on two elements of §112(f)(2) – the parenthetical statements in the first two sentences of §112(f)(2)(A) and the language specifically addressing the Benzene NESHAP in §112(f)(2)(B). The statutory language does not support EPA's position.

EPA claims that its preferred Benzene NESHAP approach is "*codified* in CAA sections 112(f)(2)(A) and (B)." 71 Fed. Reg. 76,607/3[JA088] (emphasis added). EPA misconstrues the statutory text. Section 112(f)(2)(B) states:

> Nothing in subparagraph (A) or in any other provision of this section shall be construed as affecting, or applying to the Administrator's interpretation of this section, as in effect before November 15, 1990, and set forth in the Federal Register of September 14, 1989 (54 Federal Register 38044 [the Benzene Rule]).

42 U.S.C. § 7412(f)(2)(B). Section 112(f)(2)(B) serves only as a typical savings clause that preserves a preexisting regulation promulgated before passage of the 1990 Amendments. *Cf. Air Transp. Ass'n of Canada v. FAA*, 323 F.3d 1093, 1095-96 (D.C. Cir. 2003) (refusing, where the text is clear, to expand the significance of a savings clause based on purported ambiguity in the legislative history). To read the statute otherwise, as EPA does, is to incorporate *sub silentio* an entirely different and weaker safety standard, overriding the unambiguous

statement in §112(f)(2)(A) that cancer risk in excess of 1-in-1 million compels regulation. 42 U.S.C. §7412(f)(2)(A). Congress does not "hide elephants in mouseholes," *Am. Trucking*, 531 U.S. at 468, and would not legislate so cryptically as to negate an express standard of 1-in-1 million risk with an indirect reference that allows EPA to endorse cancer risk 100 times greater. *See FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 160 (2000).[9]

Section 112(f)(2)(A) itself never mentions, nor even alludes to, the Benzene NESHAP, much less "codifies" it, as EPA claims. 42 U.S.C. §7412(f)(2)(A). Rather, §112(f)(2)(A) states, in the first sentence, that Congress shall promulgate standards if "required in order to provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990)," and further states, in the second sentence, that such standards "shall provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990)." *Id.* EPA asserts that this parenthetical clause codifies the Benzene NESHAP rule into the statute. 71 Fed.

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[9] Assuming *arguendo* that EPA correctly interprets §112(f)(2)(B) as a wholesale adoption of the Benzene NESHAP test as the statute's safety standard, it would only apply to residual risk regulation of *non*-carcinogens. The third sentence of §112(f)(2)(A), governing carcinogens, does not contain the "ample margin of safety" language that EPA claims to be governed by the Benzene rule. Further, assuming that the language of §112(f)(2)(B) is ambiguous, EPA's interpretation must be rejected as unreasonable, *Chevron*, 467 U.S. at 843, because EPA reads subsection (f)(2)(B) to negate the immediately preceding sentence in subsection (f)(2)(A), with no explanation for why Congress would contradict itself. *See South Coast Air Quality Mgmt. Dist.*, 472 F.3d at 895 ("We further hold that EPA's interpretation of the Act in a manner to maximize its own discretion is unreasonable because the clear intent of Congress in enacting the 1990 Amendments was to the contrary.").

Reg. 76,607-08[JA088-89]. But allowing the "parenthetical to drive the interpretation of the whole provision" would allow "the statutory tail to wag the dog." *Cabell Huntington Hosp., Inc. v. Shalala*, 101 F.3d 984, 990 (4th Cir. 1996) ("A parenthetical is, after all, a parenthetical, and it cannot be used to overcome the operative terms of the statute."). EPA's interpretation is untenable, especially because, in the very next subsection, Congress refers to the Benzene NESHAP rule by date and Federal Register cite. Given the express Congressional reference to the Benzene NESHAP in §112(f)(2)(B), the same meaning could not inhere in the markedly different parentheticals in §112(f)(2)(A).

Contrary to EPA's assertions, the parentheticals in §112(f)(2)(A) merely preserve EPA's ability to exercise judgment in determining the ample margin of safety, as permitted prior to the November 15, 1990 amendments to the Act. The pre-1990 version of CAA §112 directed the Administrator to set emission standards "at the level *which in his judgment* provides an ample margin of safety to protect the public health." 42 U.S.C. §7412(b)(1)(B) (1981) (emphasis added). The two parenthetical references in post-amendment §112(f)(2)(A) both immediately follow the phrase "provide an ample margin of safety to protect public health in accordance with this *section*." *Id.* §7412(f)(2)(A) (emphasis added). Thus, the parentheticals clarify that Congress did not intend, through the 1990 Amendments, to redefine the extent of EPA's discretion to determine what

constitutes an ample margin of safety to protect the public health from *non-carcinogens*. Legislative history confirms that these parenthetical phrases refer to "the Administrator's judgment as to whether promulgation is required in order to provide an ample margin of safety to protect the public health in accordance with section 112 as in effect prior to enactment of these amendments," and clarifies that "[w]hile the Committee wants EPA to exercise this judgment under current law, it is not by this action continuing those provisions, *except for these limited purposes*." H.R. REP. NO. 101-490, Pt. 1 at 330-31 (1990) (discussing H.R. 3030), 2 LEGIS. HIST. 3354-55 (emphasis added).

Notably, Congress did *not* include this parenthetical in the third sentence of §112(f)(2)(A), at issue here, which sets the standard for regulation of cancer risk at 1-in-1 million. 42 U.S.C. §7412(f)(2)(A). This provides compelling textual evidence that Congress did intend to limit EPA's exercise of judgment under the residual risk program with regard to the acceptable level of cancer risk specifically.

3. EPA's Claim that it Promulgated Standards by Not Changing the Existing Standards Lacks Merit.

EPA asserts in the alternative that it is in fact "promulgat[ing] standards" by "effectively re-adopt[ing]" the existing HON, but without any changes meant to lower risk, much less to below 1-in-1 million. RTC 14-15[JA519-20] ("[W]e assert that the final residual risk rulemaking for the HON satisfies any duty to 'promulgate standards' under CAA section 112(f), since our action effectively re-

adopts the HON (with minor revisions) as fulfilling the substantive mandate of CAA section 112(f) . . . ."). This makeweight argument ignores the statutory requirement that EPA "shall," upon identifying a risk of exposure to a carcinogen greater than 1-in-1 million, "promulgate standards *under this subsection*." 42 U.S.C. §7412(f)(2)(A) (emphasis added). The statute's requirement that EPA promulgate standards "under this subsection" refers to subsection (f), not subsection (d) under which the original HON rule was adopted. EPA's defense that it left in place existing standards under a *different* subsection – the very existing standards that the residual risk provision requires EPA to revise – ignores its statutory obligation to "promulgate standards" under subsection (f).[10]

* * *

Ultimately, EPA reads the statute's 1-in-1 million language entirely out of the text, by claiming that it is both entirely redundant (because it merely "triggers" an evaluation that must take place anyway) and irrelevant (because EPA is free to disregard it and substitute its own, much higher risk level). The Court should reject the agency's interpretation.

[10] Indeed, EPA concedes on the first page of the challenged rule that its action is in fact a "decision. . . not to revise the existing standards based on the residual risk and technology review." 71 Fed. Reg. 76,603/3[JA084]. EPA's attempted re-characterization of its decision not to promulgate standards as a decision to "re-adopt" existing standards is an unconvincing semantic trick.

C. EPA Unlawfully Relied on Cost Considerations in Deciding Not to Promulgate Emission Standards under §112(f)(2).

Even assuming that EPA may conduct its own calculation of the ample margin of safety for exposure to all HAP, including carcinogens over and above 1-in-1 million cancer risk, EPA unlawfully relied on cost considerations in determining its chosen ample margin of safety (and in deciding not to regulate residual risk). 71 Fed. Reg. 76,605/1[JA086] ("The finding regarding an 'ample margin of safety' is based on a consideration of the additional costs of further control . . . and the relatively small reductions in health risks that are achieved . . . .").

The first sentence of §112(f)(2)(A) directs EPA to promulgate standards in two cases: (1) "if promulgation of such standards is required in order to provide an ample margin of safety to protect public health," or (2) "to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect." 42 U.S.C. §7412(f)(2)(A). Congress specifically enumerated cost as a consideration for standards designed to prevent "an adverse environmental effect" where such standards were "more stringent" than necessary to protect human health with an ample margin of safety. *Id.* Congress did not include language authorizing EPA to consider costs when determining whether health-based standards are necessary to provide an ample margin of safety to protect public health.

Congress knew how to permit consideration of cost under §112 when it wanted to, as shown repeatedly in other provisions of the same section. *See, e.g.*, *id.* §§7412(d)(2), (d)(8)(A)(i), (d)(8)(B)(i), (h)(2)(B). Congress chose not do so in §112(f)(2), other than as necessary to determine the ample margin of safety to prevent an "adverse environmental effect," which is not at issue here. *Id.* §7412(f)(2)(A). Therefore, EPA violated the plain language of the Clean Air Act by considering costs when determining whether *health-based* standards are required to provide an ample margin of safety to protect public health.

In *American Trucking*, 531 U.S. at 471, the Supreme Court interpreted CAA language very similar to that in §112(f)(2) and found it "unambiguously bars cost considerations." The Court in *American Trucking* interpreted §109(b)(1), which directs EPA to set "ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on [the scientific/technical] criteria [of section 108] and allowing an adequate margin of safety, are requisite to protect the public health." 42 U.S.C. §7409(b)(1). Just as for the public health protections in §112(f)(2)(A), there is no mention of costs. The Court defined "public health" in the common-sense way as "the health of the public," *American Trucking*, 531 U.S. at 466, rejecting industry's argument that cost considerations were somehow integrated into that term. The Court further noted the frequent, explicit statutory references requiring EPA to consider costs in performing various

duties, and stated that "[w]e have therefore refused to find implicit in ambiguous sections of the CAA an authorization to consider costs that has elsewhere, and so often, been expressly granted." *Id.* at 467. As a result, the Court ruled that absent a "*textual* commitment of authority to the EPA to consider costs," cost considerations are barred. *Id.* at 468 (emphasis added). EPA's incorporation of costs into the ample margin of safety determination is incompatible with the plain language of the residual risk provisions and the Supreme Court's decision in *American Trucking*.

III. EPA'S FAILURE TO REVIEW AND REVISE EMISSION STANDARDS TO ENSURE COMPLIANCE WITH MACT FLOORS UNDER §112(d)(6) IS UNLAWFUL.

A. EPA Must Establish MACT Floors When It Reviews and Revises Standards Under §112(d)(6).

CAA §112(d)(2) requires EPA to promulgate emissions standards for HAPs that "require the maximum degree of reduction in emissions" achievable, or MACT. Congress limited EPA's discretion in determining MACT by setting a "floor" – mandating that emission standards be at least as stringent as minimum technology requirements. 42 U.S.C. §7412(d)(3). Pursuant to §112(d)(3), emission standards for major existing sources "shall not be less stringent … than—the average emission limitation achieved by the best performing 12 percent of the existing sources…." *Id.* Emission standards for new major sources "shall not be less stringent" than the "best controlled similar source." *Id.* As this Court

explained in *National Lime,* 233 F.3d at 629, EPA implements these requirements through a two-step process: the agency first sets emission floors for each pollutant and source category and then determines whether stricter, "beyond-the-floor" limits are achievable in light of the factors listed in §112(d)(2).[11] *See also Sierra Club*, 479 F.3d at 877. EPA must "review, and revise as necessary" these emission standards at least every eight years, "taking into account developments in practices, processes, and control technologies." 42 U.S.C. §7412(d)(6).

When EPA reviewed the HON, EPA failed to determine the "MACT floors" for new and existing sources. That is, EPA failed to determine the average emission limitation achieved by the best performing 12 percent of existing SOCMI facilities or to determine the best controlled similar source and ensure that the emission standards are at least that stringent. 71 Fed. Reg. 76,606/1[JA087].

EPA's failure to ensure the emission standards meet the minimum technology-based statutory requirements violates the unambiguous language of the statute. *See Chevron,* 467 U.S. at 842-43. Moreover, EPA's interpretation of §112 unreasonably and impermissibly ignores, eight years into the process of controlling HAPs, Congress's specific limitations on the agency's discretion. *Id.*

[11] §112(d)(2) directs EPA to consider costs and "non-air quality health and environmental impacts and energy requirements" when setting beyond-the-floor limits. *See* 42 U.S.C. §7412(d)(2).

1. EPA Ignored §112's Core Requirement When It Failed to Identify and Adopt New MACT Floors Under §112(d)(6).

Under §112(d), the essence of a "MACT standard" is that it must be at least as stringent as the best controlled similar source – for new sources – or the average emission limitation achieved by the best performing 12 percent of existing sources. 42 U.S.C. §§7412(d)(2), (d)(3). In order to satisfy the Congressional mandate that the emission standards are no less stringent than the MACT floor, EPA must determine during the eight-year review the best controlled similar source and the best performing 12 percent of existing sources. EPA failed to do so here. Without performing a MACT floor analysis, EPA cannot know whether it is "necessary" to revise the standards, "taking into account developments in practices, processes, and control technologies" according to Congress's clear technology-based framework for regulating HAPs under section 112 of the Act. *Id.* §7412(d)(6).

EPA claims that the review mandated by §112(d)(6) does not "requir[e] another analysis of MACT floors for existing and new sources" – instead, the agency claims, the requirement to revise the standard "as necessary" gives it discretion to discard Congress's MACT standard-setting scheme and to substitute "a wide range" of factors it deems "relevant." 71 Fed. Reg. 34,436/3[JA073]. But in attempting to "arriv[e] at the best balance of costs and emissions reduction," *id.* 34,437/2[JA074], EPA disregards the plain language of the statute and Congress's

requirement that the emissions standards reflect the maximum achievable emission reductions that are at least as stringent as the MACT floor.

EPA's analysis is strikingly similar to the approach rejected by the Supreme Court in *American Trucking*. As in the ozone protection provisions at issue in *American Trucking*, Congress built into §112 specific provisions "meant to limit [EPA] discretion." 531 U.S. at 485. In the provisions at issue in *American Trucking*, Congress limited agency discretion by publishing a table specifying classifications and requirements for areas that failed to meet the ozone health protection standard. *Id.* at 482. Upon revising the standard, EPA attempted to treat those discretion-limiting provisions as obsolete and to assert authority to substitute its own policies for Congress's ozone protection plan. *Id.* at 484. The Court ruled that "EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion." *Id.* at 485.

Similarly, in the §112 context, Congress adopted provisions that limit EPA's discretion by identifying "MACT floors" below which EPA may not set standards for HAPs. Once again, however, EPA has asserted the right to treat these discretion-limiting provisions as obsolete when it revises standards. Here, as in *American Trucking*, it is unlawful for EPA to interpret the statute in a way that nullifies Congress's restraints on its discretion.

2. Legislative History Reveals the Fallacy of EPA's Interpretation.

Prior to 1990, §112 directed EPA to use health-risk-based regulations for air pollution. In 1990, Congress determined that the risk-based approach "worked poorly." *NRDC v. EPA*, 489 F.3d at 1368 (citation omitted). Frustrated that EPA had only set risk-based emission standards for seven pollutants in nineteen years, Congress reached a "broad consensus" that it needed to restructure the hazardous air pollutants program to require technology-based standards. S. REP. No. 101-228, at 133, 5 LEGIS. HIST. 8473; *Cement Kiln Recycling Coal. v. EPA*, 255 F.3d 855, 857 (D.C. Cir. 2001).

At the heart of amended CAA §112 lies the MACT floor. Congresswoman Collins, introducing the amendment to H.R. 3030[12] that added the MACT floor, described the amendment as requiring a "solid, definite, stringent floor for the MACT standard." House Debate on H.R. 3030 (May 23, 1990), 2 LEGIS. HIST. 2667. She explained that "There needs to be a minimum degree of control in relation to the control technologies that have already been attained by the best existing sources" because "EPA's past interpretation of provisions containing the word 'best' or 'maximum' shows how essential it is to specify a floor for control levels." *Id.* Likewise, Representative Waxman acknowledged that "over time, the

[12] Although S. 1630 passed the House and became the 1990 CAA Amendments, the Conference Report explains that "[t]he House amendment to the text of the bill struck out all of the Senate bill after the enacting clause and inserted a substitute text." H. REP. NO. 101-952, at 335 (1990) (Conf. Rep.), 1 *Legis. Hist.* 1785. Therefore, the amendments to H.R. 3030 that this brief cites to are the source of the legislative language at issue in §112(d).

minimum stringency of MACT standards will increase" as sources that were initially excluded from the MACT calculations because they were using the lowest achievable emission rate (LAER) are brought into the calculation. *Waxman Overview* at 1776 n. 256. Nowhere does the legislative history suggest that after eight years Congress intended for EPA to abandon the statute's carefully-crafted statutory minimum requirements and to set emission standards based on its own policy preferences.

B. EPA's Interpretation Is Inconsistent with the Statute.

EPA claims that the phrase "review, and revise *as necessary*" in §112(d)(6) allows the agency to abandon the standard-setting scheme Congress included in §§112(d)(2) and (3). 71 Fed. Reg. 34,437[JA074] (emphasis added). To the contrary, §112(d)(6) directs EPA to follow the same technology-based process it used to set the MACT in the first place when – echoing language in §112(d)(2) – it requires EPA to "tak[e] into account developments in practices, processes, and control technologies." *Compare* 42 U.S.C. §7412(d)(6) ("practices, processes, and control technologies") *with id.* §§7412(d)(2)(D) ("work practice"), (d)(2)(B) ("processes") & (d)(2)(C) ("collect, capture or treatment"). Significantly, Congress maintains §§112(d)(2) & (3)'s *exclusive* focus on technology when reminding EPA to take into account emissions control-related "developments" under §112(d)(6).

Under traditional principles of statutory construction, because the specific language "tak[e] into account developments in practices, processes, and control technologies" follows the general "as necessary" language, this language effectively limits the meaning of "as necessary," bounding and constraining EPA's discretion. *See Gutierrez v. Ada*, 528 U.S. 250, 255 (2000) ("[W]ords ... are known by their companions."); *cf. Cement Kiln Recycling Coal. v. EPA*, 493 F.3d 207, 221 (D.C. Cir. 2007) ("'Where general words follow specific words,' the general words are 'construed to embrace only objects similar in nature to those objects enumerated by the preceding specific words.'"). Indeed, this is the only reasonable reading of the statute, especially in light of Congress's understanding that "practices, processes, and control technologies" would continue to develop, improving in-practice emissions performance, and leading to more stringent standards under §112(d)(6). *See* Waxman Overview at 1776 n. 256. Nonetheless, EPA focused almost exclusively on cost and risk to conclude that revision was not "necessary." *See* 71 Fed. Reg. 34,437[JA074]. EPA's convoluted reading of §112(d)(6)'s "as necessary" language is not supported by the plain language of the statute and is therefore unlawful.

C. EPA's Specific Interpretation of §112(d)(6) Contravenes the Statutory Text, Structure and Controlling Judicial Precedent.

EPA's arguments that it need not determine the MACT floors contravene the statute and fail to provide the "extraordinarily convincing justification" necessary

to depart from the CAA's plain language. *See Appalachian Power*, 249 F.3d at 1041. EPA tries to justify its failure through claims that it "has substantial discretion in weighing all of the relevant factors in arriving at the best balance of costs and emissions reduction and determining what further controls, if any, are necessary." 71 Fed. Reg. 34,437[JA074]. EPA used this so-called discretion to decline to undertake a "robust technology assessment" of the technology-based MACT standards. *Id.*

In support of its position, EPA erroneously relies on *Husqvarna AB v. EPA*, 254 F.3d 195 (D.C. Cir 2001). In *Husqvarna*, this Court ruled that where the statute enumerated factors for EPA consideration, EPA did not have to consider all factors equally. *Id.* at 200. But here, EPA has departed from the factors that Congress enumerated in §112(d)(6) ("developments in practices, processes, and control technologies") and substituted its own, primarily cost and risk. *Husqvarna* does not justify EPA's refusal to examine "practices, processes, and control technologies" to determine the current MACT floors. As this Court recently recognized: "cost is not a factor that EPA may permissibly consider in setting a MACT floor." *NRDC v. EPA,* 489 F.3d at 1376 (*citing Nat'l Lime*, 233 F.3d at 640).

In addition, with respect to cost in particular, Congress did not provide in §112(d)(6) a "clear" "textual commitment of authority to the EPA to consider

costs." *Am. Trucking*, 531 U.S. at 468. To the contrary, the Act omits mention of both cost and risk in §112(d)(6), while directing EPA to consider technology factors alone.

D. EPA's Rule Violates the Act's Mandate for the Scope of Regulation.

Finally, in declining to adhere to the required statutory framework for regulatory standard-setting under §112(d), EPA also fails to satisfy the basic statutory obligation to identify appropriate emission limitations for *all listed HAPs* emitted from SOCMI facilities, and *all sources of pollutant emissions*. *See National Lime*, 233 F.3d at 634-35; *Sierra Club v. EPA*, 479 F.3d at 878. EPA's failure to regulate these emissions in the first instance cannot function as an excuse to avoid meaningful regulation now. To the contrary, because EPA's original HON rulemaking was deficient in this regard, §112(d)'s requirement to review and revise MACT standards "as necessary" necessarily includes the obligation to bring such standards into compliance with the Act, as interpreted by this Court.[13] In particular, the agency must establish emission standards required by §§112(d)(2) and (3) for *each listed HAP* that SOCMI facilities emit and *each building, structure, facility, or installation* at SOCMI facilities that emit such HAP.[14] As

[13] In this context, "as necessary" must be interpreted to mean (among other things) as necessary to correct prior action that resulted in impermissibly under-protective standards.

[14] Sections 112(d)(2) and (3) require that EPA regulate "sources" within each source category, and §§112(a)(1) and (3), along with §111(a)(3), identify stationary sources as including "*any* building, structure, facility, or installation which emits or may emit *any* air pollutant." 42 U.S.C.

noted elsewhere – *supra* Regulatory Background and *infra* Section IV.B – EPA has neglected entirely to establish emission limitations for inorganic HAP emissions and has not regulated emissions of any kind from various structures at SOCMI facilities (such as cooling towers and auxiliary equipment). EPA's failure to establish emission limits for all emissions and sources would allow unlawful standards to continue unchanged, even in the face of the agency's obligation to "review and revise" its regulatory decision-making. Such a result is illogical and indefensible.

* * *

EPA's refusal to revise emission standards under §112(d)(6) is unlawful because the agency substitutes consideration of risk and cost, *see* 71 Fed. Reg. at 76,605/3[JA086]; RTC 7[JA512], for the MACT analysis required under §112(d). The Court should remand the HON to the agency to lawfully review and revise the rule's emission standards.

IV. EPA'S RISK ASSESSMENT USED INCOMPLETE, UNVERIFIED, AND UNREPRESENTATIVE DATA AND ARBITRARILY UNDERESTIMATED THE HEALTH RISKS POSED BY HON FACILITIES.

Undertaking an accurate and thorough assessment of the residual risks following MACT standards is central to §112(f)'s mandate. With respect to source

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§7411(a)(3). This court has held unequivocally that "any" means "any." *NRDC v. EPA*, 489 F.3d at 1260.

categories like the SOCMI that emit carcinogens, the statute is unmistakably clear: EPA must assess whether the MACT controls "reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in one million." 42 U.S.C. §7412(f)(2)(A). EPA's challenged decision did not account for "lifetime excess cancer risks to the individual most exposed to emissions" because it was premised upon a risk assessment that relied on shoddy data and was grossly inadequate in scope. EPA's decision is therefore arbitrary, capricious, and unlawful.

A. EPA's Risk Assessment Arbitrarily Used Incomplete, Unverified, and Unrepresentative Data and Relied Upon Faulty Assumptions.

The data used by EPA in its HON risk assessment were incomplete and unrepresentative of the source category, rendering the resultant decisions arbitrary and capricious. Additionally, the lack of data led EPA to make insupportable assumptions in its risk assessment, similarly resulting in arbitrary and unlawful decision-making.

1. EPA Arbitrarily Refused to Collect Data and Instead Relied Upon Incomplete and Unverified Data Voluntarily Collected by a Trade Organization.

EPA did not exercise its §114 authority to issue an "information collection request" and collect the data to conduct a comprehensive assessment of the residual risks presented by the 238 SOCMI facilities. According to EPA, industry's voluntary "information gathering did not provide all the parameters and

information needed as inputs to the modeling system." RRA 5-1[JA171]. A majority of SOCMI facilities (134 of 238) did not respond to the voluntary questionnaire. 71 Fed. Reg. 34,429/2[JA066]. In those instances in which facilities did bother to respond, the responses were often spotty, with many "instances where information was not provided or the information provided was unclear." RRA 5-1[JA171]. According to the Risk Assessment, for some "basic release characteristics needed as model inputs," as many as 31% of the 104 responses to the industry questionnaire failed to supply the necessary information. RRA 5-18 to 5-19[JA188-89].

Even where questionnaires were fully completed by a facility, EPA mostly was unable to verify that data contained therein were collected using an appropriate methodology. As EPA admitted, "In some instances, background was provided that indicated the basis for the emission estimates. But, *in most cases* this information was not included with the voluntary submittals." RRA 5-9[JA179] (emphasis added). The Risk Assessment, therefore, "*assumed that emissions were estimated using established methodologies. . . .*" *Id.* (emphasis added).

Additionally, the data used in EPA's Risk Assessment were out-of-date. Although the calculations were completed in 2005, the data represented 1999 emissions, *see* 71 Fed. Reg. 34,436/3[JA073], creating an admitted "source of

uncertainty" as some HON facilities in the interim "may have increased their emissions as a result of growth." *Id.*[15]

The most basic requirement for agency action is that "the agency must examine the relevant data." *State Farm*, 463 U.S. at 43. Moreover, "the evidence that the [agency] does consider must be probative of the findings it is required to make" and the agency "must explain why more probative evidence, if available, was not collected." *Brae Corp. v. U.S.*, 740 F.2d 1023, 1041 (D.C. Cir. 1984).

EPA fails to clear this important hurdle. Lacking the complete, accurate, and current data adequate to develop a robust characterization of emissions from HON facilities, EPA was unable to produce a risk assessment that satisfies the requirements of §112(f). In particular, EPA cannot competently identify the "lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory." 42 U.S.C. §7412(f)(2)(A). The arbitrariness of EPA's reliance upon the incomplete and uncertain industry-supplied data is compounded by the agency's failure to exercise its §114 authority to gather adequate data and its refusal to explain this failing. *Brae Corp.*, 740 F.2d at 1041.

[15] Indeed, evidence suggests that emissions are higher now than in 1999. In 1999, the capacity utilization rate for the chemical industry was approximately 76 percent, down from the maximum utilization rate in the previous decade of approximately 84 percent. RRA 5-23[JA193].

2. EPA's Risk Assessment Relied Upon Faulty Assumptions and Admittedly Unrepresentative Data.

Nearly 60 percent of SOCMI facilities refused to answer the voluntary questionnaire, forcing the agency to acknowledge that "the data used in the assessment were not obtained from a truly random survey" and that "EPA cannot demonstrate that the emissions data obtained through the industry questionnaire are proportional to the emissions from the entire source category." RTC 57-58[JA562-63]. EPA noted in the preamble to the proposal that the 104 facilities "represent[ed] only a segment of the industry," creating a "source of uncertainty" as "*[i]t is unclear what bias may exist in the data or the extent to which the 104 facilities in the survey are representative of the maximum risks posed by the remaining 134 facilities.*" 71 Fed. Reg. 34,436/3[JA073] (emphasis added). Implicit in EPA's admission of inherent uncertainty is an acknowledgment that the lowest-emitting SOCMI facilities are those most likely to respond to a voluntary survey, rendering data from such facilities unrepresentative of the source category as a whole and unfit for calculation of the maximum individual risk presented by any facility in the source category.

Despite the agency's conclusion that "the emissions data obtained through the industry questionnaire *cannot be proven to be proportional* to the emissions from the entire source category," *Id.* 76,607/1[JA088] (emphasis added), EPA nonetheless assumed exactly such a proportionality in the Risk Assessment. More

specifically, to calculate the risk posed by the entire source category, EPA: (1) input the emissions data voluntarily reported by the 104 facilities; (2) calculated the risks associated with these facilities; and then (3) "extrapolated [these results] to the entire source category of 238 existing facilities with HON CMPUs using the ratio of 2.3 (238/104)." *Id.* 34,431/1[JA068] "This factor [of 2.3] is simply the ratio of the total number of HON facilities to the number of facilities in the industry data," that is, straight proportionality. *Id.* 76,607/1[JA088].

EPA's assumption that the emissions estimates obtained through the ACC are proportional to emissions for the entire source category is remarkable given information before the agency proving that the ACC data were, in fact, *not* proportional by a factor of 2.3. In addition to analyzing the ACC data, EPA also reviewed data from the agency's 1999 National Emissions Inventory ("NEI"), which provided facility-level emissions data (*e.g.*, accounts for emissions from all SOCMI equipment and processes, not just those specific emissions points subject to the HON) for 226 HON facilities. RRA 1-4[JA138]. With respect to carcinogenic HAPs, the annual emissions modeled for all HON facilities from the NEI data exceeds the ACC data by a factor ranging from 3.7 to 5.3. For example, the 104 facilities participating in the voluntary survey reported benzene emissions of 385 tons per year ("tpy"); in contrast, using the NEI data, the modeled emissions for all facilities in the source category totaled 2,057 tpy of benzene. *Compare*

RRA Tbl.F-2[JA339] *with* App. K[JA385]. The NEI emissions data for benzene exceed the ACC data by a factor of 5.3 – and by a factor of 3.7 for the carcinogens 1,3-butadiene and 4.2 for vinyl chloride, *see id.*[JA339, JA342, JA384, JA388] – clearly rebutting EPA's assumption that the ACC data are representative of, and proportional to, emissions for the entire source category.

An agency must "articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *State Farm*, 463 U.S. at 43. For EPA to observe that "Clearly, ... [we] cannot demonstrate that the emissions data obtained through the industry questionnaire are proportional to the emissions from the entire source category," RTC 58[JA563], and nonetheless elect to extrapolate risk results (using a simple multiplier) for the entire source category from the very data that cannot be proven proportional, is not only internally contradictory but wholesale irrational. Such irrationality, with no connection between the facts found and the choice made, compels the conclusion that the Risk Assessment – and the decisions premised upon it – are arbitrary.

Despite EPA's dramatic admissions regarding the uncertainty and bias inherent in the industry-supplied data, EPA nonetheless asserts that "the data were appropriate for use in conducting the residual risk assessment." 71 Fed. Reg. 76,607/1[JA088]. EPA offers three half-hearted arguments in defense of the data,

each of which merely serves to underscore the arbitrariness of the agency's reliance on data voluntarily reported by a minority of the relevant sources.

EPA first defends the data by arguing that the CAA "does not specify the type of data, or the method of acquiring it" for residual risk rulemaking. *Id.* 76,606/3[JA087]. This is a *non sequitur*, as the statute cannot be reasonably interpreted to permit the agency to utilize any data collected under any circumstance. Moreover, §112(f)(2) does specify that the residual risk analysis for a source category such as SOCMI – which emits numerous carcinogens – must address the "lifetime excess cancer risks to the *individual most exposed* to emissions from a source in the category or subcategory." 42 U.S.C. §7412(f)(2)(A) (emphasis added). This Congressional prescription for the focus of the risk analysis upon the single most exposed individual necessarily creates requirements for EPA's data collection and analysis. EPA may not use incomplete data, which only represent "a segment of the industry," and which cannot be proven to be "representative of the maximum risks posed by the remaining ... facilities," to fulfill its statutory obligation to collect data (and to collect it in a manner) that allows the agency to determine the lifetime excess cancer risks to the individual most exposed to SOCMI emissions. As noted above, the agency is obligated to collect "the relevant data," *see State Farm*, 463 U.S. at 43, that is "probative of the findings it is required to make." *Brae Corp.*, 740 F.2d at 1041.

Next, EPA defends the limited, industry-supplied data based on strained observations regarding "the structure of the industry." Specifically, EPA observes that the 104 HON facilities in the industry survey reported the collective presence of 271 CMPUs and that this information, when "scaled" to the source category's full 238 facilities, results in an estimate of 732 CMPUs for the industry. 71 Fed. Reg. 34,429/2[JA066]. Noting that, "[i]n the background information for the HON, it was estimated that there were 729 HON CMPUs nationwide," EPA leaps to the conclusion that "[t]he similarities in the structure of the industry indicate that the 1999 collected data provide a reasonable picture of post-compliance emissions of organic HAP." *Id.*[JA066] While it may or may not be reasonable to assume that the data from the 104 facilities is representative of the entire industry with respect to *the average number of CMPUs per HON facility*, it is wholly illogical to assume – and EPA provides no basis for the assumption – that the number of CMPUs somehow correlates with *emissions*. The illogic of EPA's conclusion is underscored by the agency's description of the SOCMI source category as encompassing the production of 385 different chemicals and "a wide range of facilities, from large facilities manufacturing a few chemicals in large volumes, to smaller facilities manufacturing many different finished chemicals in smaller volumes." RRA 2-4[JA144]. This alone demonstrates widely variable emissions.

EPA's final argument in support of the industry data is premised upon a cross-check of the risks calculated from the industry data against risks calculated for the SOCMI source category using different data from the NEI. EPA used "whole-facility emissions data for 226" of the estimated 238 HON facilities to conduct "a screening-level risk assessment" of chronic cancer and noncancer risks for the source category. 71 Fed. Reg. 76,607/1[JA088]. EPA's comparison of the two risk assessments resulted in the following faint praise for the agency's primary risk assessment: "*the highest risks* from using the NEI data *were of the same order of magnitude* as those estimated using the industry data." *Id.*[JA088] (emphasis added). "Based on this general corroboration with the NEI data, [EPA] concluded that the industry data were ... appropriate for use in conducting the residual risk assessment." *Id.* EPA then based its findings and decisions entirely on the voluntary industry data.

Although EPA chooses to view the results of its NEI risk assessment as "generally corroborating" the industry-supplied data for the 104 facilities, EPA's conclusion is strikingly irrational. The NEI data identified maximum health risks – driven by HON-regulated HAPs – that were *three to six times higher* than the maximum risks calculated from industry data, *see id.* 34,431/1[JA068], and found such high risks to be present at more facilities than the estimates derived from the

ACC data.[16] This is unsurprising, given the obvious disincentive for high-emitting facilities to participate in the ACC's voluntary data collection effort. Indeed, the NEI data revealed that two of the three highest risk SOCMI facilities (where risk is driven by HON-regulated emissions) – including the facility with the highest HON-related risk – were not among those that submitted data in response to the ACC questionnaire. *Compare* RRA 8-10[JA248] *with* RRA Tbl.5-1[JA172-74].

Analysis of the NEI data verifies that the industry-supplied data from 104 facilities is not representative of the source category as a whole, because the industry data – used for the agency's primary risk assessment – significantly understates facility emissions, the maximum facility risks, the number of facilities with the most extreme risks, and the highest emitting facilities. Despite EPA's assertion that the industry data "were appropriate for use in conducting the residual risk assessment," 71 Fed. Reg. 76,607/1[JA088], this conclusion is undercut by the data itself and by EPA's own admissions about its unrepresentativeness.

Because EPA has "offered an explanation for its decision that runs counter to the evidence before the agency," *State Farm*, 463 U.S. at 43, its decision to use the industry data in its Risk Assessment is arbitrary. Further, the industry data are

[16] The risks identified by the NEI assessment are even higher when all risks – and not just "HON component driven" risks – are acknowledged. The NEI assessment identified 12 facilities with estimated maximum individual lifetime cancer risks greater than 100-in-1 million, with the highest maximum individual cancer risk estimated at 500-in-1 million. RRA 8-9[JA247]. For noncancer effects, the highest maximum health risk calculated from the NEI dated was 120 times greater than the maximum risk calculated using the industry data. *Id.* 8-10[JA248].

not "probative of the finding" that EPA was required to make, namely, the lifetime excess cancer risks to the individual most exposed to SOCMI emissions. It was therefore arbitrary for EPA to predicate rulemaking on such flawed data. *Brae Corp.*, 740 F.2d at 1041.

B. EPA's Risk Assessment Is Inadequate in Scope and Arbitrarily Underestimates Health Risks Posed by HON Facilities.

EPA's Risk Assessment, beyond relying upon fatally flawed data, is also arbitrary because it wholly ignores significant sources of HAP emissions from the SOCMI source category. Section 112(f)'s "lifetime excess cancer risks" directive, as EPA has previously recognized, requires EPA to do more than consider "[t]he individual emission points regulated under the [MACT] standards being evaluated." 70 Fed. Reg. 19,997/1[JA029]. According to EPA's Residual Risk Report, "[r]esidual (post-MACT) emissions are emissions associated with both controlled and uncontrolled sources within the source category." RRR 80[JA716]. At a minimum, therefore, §112(f) requires that EPA evaluate all risks posed by HAP emissions from the category or subcategory, whether the emissions originate from a currently regulated or unregulated "emission point."

Rather than consider all HAPs emitted from facilities within the SOCMI source category, EPA's residual risk analysis only accounts for "organic HAP emissions from process units subject to the HON." RRA 1-4[JA138]. Indeed, the *only* data solicited in the industry questionnaire was for organic HAP from the five

emission points currently regulated by the HON. *See* RRA 5-9[JA179] ("The ACC data form requested emissions information from five separate emissions source types: process vents, transfer racks, equipment leaks, storage vessels, and wastewater.").

An agency rule is arbitrary and capricious if the agency "entirely failed to consider an important aspect of the problem," *State Farm*, 463 U.S. at 43, or "neglected to consider a statutorily mandated factor." *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004). EPA unlawfully ignored §112(f)'s plain command that residual risk analysis account for all "emissions from a source in the category or subcategory." 42 U.S.C. §7412(f)(2)(A).

As discussed below, EPA underestimated the true risk to public health and the environment from SOCMI facilities by failing to consider: (1) organic HAPs emitted from cooling towers and auxiliary equipment; (2) inorganic HAPs emitted from all HON emission points; (3) facility "clusters"; (4) allowable (as opposed to actual) facility emissions; and (5) upset emissions.

1. Cooling Towers and Auxiliary Equipment

EPA's residual risk analysis for the SOCMI source category solely accounts for "organic HAP emissions from process units subject to the HON." RRA 1-4[JA138]. The ACC data form requested emissions information for the five

already regulated emissions points, *see supra*, without soliciting information on so-called "auxiliary" HON equipment that also emit HAP, like cooling towers. Consequently, "one of the uncertainties associated with the emission estimates used for the HON-component risk assessment was that few facilities reported emissions from auxiliary processes, specifically cooling towers." *Id.* 8-2[JA240].

Although not requested by the ACC questionnaire, "[s]everal facilities reported emissions from cooling towers." *Id.* 5-9[JA179] (identifying *16* facilities out of *238*). EPA analyzed this meager cooling tower data and observed that the estimated cancer risk for 2 of the 16 cooling towers was 1-in-1 million. RTC 21[JA526]. "From this screening analysis, [EPA] concluded that cooling towers are not a significant source of risk at HON facilities." *Id.*

EPA's conclusion that the risks posed by cooling towers are not "significant" – and therefore may be ignored – is arbitrary in at least three respects. First, as a consequence of EPA's shoddy data collection practices, the agency necessarily based its conclusion upon unverified, unrepresentative data from a mere 16 facilities; it is likely that the risks posed by cooling towers is higher at one of the more than 220 facilities for which EPA did not receive data. Second, it is arbitrary for EPA to dismiss the significance of a lifetime excess cancer risk of 1-in-1 million, given that 1-in-1 million is the prescribed risk ceiling for *all* emissions from a source category. 42 U.S.C. § 7412(f)(2)(A); *see supra* Section

II.A. Finally, EPA's screening-level analysis for cooling towers still fails to account for HAP emissions from other auxiliary equipment at HON facilities.

The very limited data received and analyzed by EPA for cooling towers suggest that cooling towers contribute meaningfully to the total risk from HON facilities. EPA acted arbitrarily by failing to collect cooling tower and auxiliary equipment data for all HON facilities and include that data in its calculations.

2. Inorganic HAPs

EPA also failed to account for the health risks posed by *inorganic* HAPs emitted from HON facilities. The agency "*acknowledge[d] that inorganic HAP* (such as hydrochloric acid and chlorine) are emitted from some HON sources and that these pollutants *require consideration even though they were not regulated HAP in the existing NESHAP.*" 71 Fed. Reg. 76,610/2[JA091] (emphasis added). Despite conceding this obligation to consider inorganic HAP risks, EPA offered two reasons for failing to do so. First, the agency stated "these compounds were not considered in this risk assessment because data were not available to characterize emissions of those HAP." *Id.* 34,429/3[JA066]. It is beyond cavil that a lack of data cannot excuse an agency from considering an important and statutorily-mandated factor, particularly when the lack of data is the product of the agency's own inaction. EPA does not have data on inorganic HAP emissions from HON facilities because EPA refused to exercise its §114 authority, then allowed

ACC to collect voluntary emissions data, and then did not take issue with ACC's failure to request inorganic HAP data from its members. 71 Fed. Reg. 34,429/3[JA066] ("[T]he 1999 ACC data provided information on organic HAP emissions only.").

Second, EPA averred that it "conducted an additional analysis using information in the NEI," and detected "many instances" where inorganic HAPs threatened excessive noncancer health risks, but concluded that not including inorganic HAPs in the primary risk assessment did not affect the results of the HON residual risk analysis because "there were no instances where the inorganic HAP were associated with HON processes." 71 Fed. Reg. 76,610/2[JA091]. This second reason for ignoring inorganic HAPs is simply a *post-hoc* rationalization for an earlier (and arbitrary) failure to collect adequate data. In any event, the reason fails as a matter of logic and law. Inorganic HAPs must be accounted for in the residual risk analysis whether or not they are "associated with HON processes" that EPA chose to regulate in the original HON. Inorganic HAP emissions are prevalent at facilities within the SOCMI source category, and although they are not controlled pursuant to the HON (or any other MACT), §112(f) compels evaluation of the residual emissions "associated with both controlled and uncontrolled sources within the source category." RRR 80[JA716].

EPA's failure to address inorganic HAPs therefore is arbitrary because it constitutes a failure to consider an important aspect of the problem; a failure to consider a statutorily mandated factor; a departure from previous agency policy, as delineated in EPA's Residual Risk Report to Congress, *see* RRR 80[JA716]; and an internal contradiction within EPA's own rulemaking, *see* 71 Fed. Reg. 34,429/3[JA066].

3. Facility Clusters

EPA acknowledged in its Risk Assessment that many SOCMI facilities are located near other SOCMI facilities or other industrial sites – for example, many HON facilities in Texas are located in the Houston Shipping Channel area – and that "people living in these areas may be exposed to HAP emitted from multiple sites." RRA 6-10[JA206]. EPA therefore conducted a screening level assessment of HON facility "clusters," with "cluster" defined as the presence of more than one HON facility within a radius of 50 kilometers. *Id.*

After comparing "the cluster maximum individual lifetime cancer risk and the highest HON component maximum individual lifetime cancer risk in that cluster," EPA concluded "cluster effects have little or no effect on the risks to the individuals most exposed." *Id.* 6-11[JA207]. According to EPA, "individuals exposed to these highest risks typically reside very near one of the facilities, and the resulting risk is almost entirely caused by that closest facility." *Id.* Despite its

conclusion that clusters typically do not affect the highest individual risks, EPA did conclude that "the risks for other individuals living between facilities can increase." *Id.* 6-12[JA208]. For example, when cluster effects were considered for the facility cluster in Beaumont, Texas and Lake Charles, Louisiana, the number of citizens exposed to risks of 10-in-1 million or greater increased from 1,400 to 1,500 individuals and the number of citizens exposed to risks of 1-in-1 million or greater increased from 93,000 to 130,000 (an increase of 30 percent). *Id.*

EPA's cluster analysis dramatically and arbitrarily understates the risks to public health posed by SOCMI facilities because it solely relies on the ACC data. As discussed *supra*, this industry-supplied data is uncertain and unrepresentative and not fit for use in the Risk Assessment. Moreover, the shortcomings of these data – which only include emissions from 104 of 238 facilities – are particularly apparent with respect to cluster analysis. Relying upon the industry data, EPA identified 13 clusters in the data set of 104 facilities, ranging in size from 2 to 25 facilities. *Id.* 6-10[JA206].

This analysis ignores both the presence and impacts of the other 134 SOCMI facilities. For example, EPA's cluster analysis identified 25 facilities in the vicinity of Houston, Texas (*i.e.*, Houston and Galveston Counties). *Id.* 6-11[JA207]. A review of the SOCMI facility list compiled from 1999 NEI data, however, reveals that an additional 28 facilities – including two with facility-wide

risk levels exceeding 100-in-1 million – are located within Houston and Galveston Counties, *id.* App. A[JA267-83], a fact that Petitioners confirmed just by examining EPA's own facility list. EPA's failure to account for *more than half* of all SOCMI facilities in the well-known hotspot of Houston demonstrates that the agency's cluster analysis (a) failed, wholesale, to identify some clusters; (b) failed to account for all of the facilities in each cluster; and (c) underestimated both risks to the most exposed individual and overall population risks.

4. Allowable Emissions Data

EPA's risk analysis must also be deemed invalid and arbitrary because it relied on shifting estimates of "actual" emissions and not estimates of emissions at the rate allowed by HON requirements (*i.e.*, "allowable" emissions). Section 112(f) requires an assessment of risks to the maximally exposed individual after application of §112(d) MACT standards. According to EPA, "modeling the allowable levels of emissions is inherently reasonable since they reflect the maximum level sources could emit and still comply with national emission standards." 71 Fed. Reg. 76,609/3[JA090]. In a previous residual risk rulemaking EPA "modeled emissions at the rate allowed ... because it represents the source's potential emissions and risks, and is, therefore, consistent with the language in CAA section 112(f)(2)." Coke Oven Batteries Response to Comments 6[JA842].

EPA's failure to account for allowable emissions resulted in an arbitrary underestimation of the risks posed by HON facilities. As EPA conceded in the proposal, "estimated risks based on allowable emissions would be higher than the risks estimated using actual emissions." 71 Fed. Reg. 34,428-429[JA065-66].

5. Upset Emissions

"Upset" emissions are nonroutine emissions that occur during periods of startup, shutdown, and malfunction. RRA 4-7[JA163]. EPA admitted that "[t]he variability in emissions associated with nonroutine (upset) conditions can be significant in some cases, but exposure to upset emissions was not modeled" in the Risk Assessment. RRA 5-24[JA194]. This omission is particularly egregious given EPA's acknowledgement that annual upset emissions frequently average *nearly 15* percent of the annual routine emissions and may, at some facilities, *equal* annual routine emissions. *Id.* (footnotes omitted) (emphasis added). Given the empirical data that annual upset emissions may be as high as annual routine emissions at some facilities, with an average of 14 percent, EPA's failure to obtain and analyze data on upset emissions significantly underestimates and arbitrarily contravenes §112(f)'s directive to estimate risk to the maximally exposed individual.

* * *

EPA's risk assessment – arbitrarily narrow in scope – greatly underestimated the true "lifetime excess cancer risks to the *individual most exposed* to emissions" from the SOCMI source category. 42 U.S.C. §7412(f)(2)(A) (emphasis added). Accordingly, both the risk analysis itself, and the decisions predicated upon it, must be deemed arbitrary, capricious, and unlawful.

CONCLUSION

The Court should vacate the challenged EPA decision and remand to the agency to comply with the CAA.

Dated: March 4, 2008

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CERTIFICATE OF COMPLIANCE
WITH TYPE-VOLUME LIMITATION

This brief complies with the type-volume limitation of Circuit Rule 32(a)(3)(C) because—as calculated by Petitioners' word processing software—this brief contains 13,999 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

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ADDENDUM A – STATUTES

Table of Contents for Addendum A - Statutes

Clean Air Act ("CAA"), 42 U.S.C. §§7401-7671q:

HISTORICAL AND STATUTORY NOTES

Codifications

Section was formerly classified to section 1857c–3 of this title.

Reference in subsec. (e) in the original to "enactment of the Clean Air Act Amendments of 1989" has been codified as "November 15, 1990" as manifesting Congressional intent in the date of the enactment of Pub.L. 101–549, Nov. 15, 1990, 104 Stat. 2399, popularly known as the Clean Air Act Amendments of 1990.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Prior Provisions

A prior section 108 of Act July 14, 1955, was renumbered section 115 by Pub.L. 91–604 and is set out as section 7415 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

§ 7409. National primary and secondary ambient air quality standards

[CAA § 109]

(a) Promulgation

(1) The Administrator—

(A) within 30 days after December 31, 1970, shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each air pollutant for which air quality criteria have been issued prior to such date; and

(B) after a reasonable time for interested persons to submit written comments thereon (but no later than 90 days after the initial publication of such proposed standards) shall by regulation promulgate such proposed national primary and secondary ambient air quality standards with such modifications as he deems appropriate.

(2) With respect to any air pollutant for which air quality criteria are issued after December 31, 1970, the Administrator shall publish, simultaneously with the issuance of such criteria and information, proposed national primary and secondary ambient air quality standards for any such pollutant. The procedure provided for in paragraph (1)(B) of this subsection shall apply to the promulgation of such standards.

(b) Protection of public health and welfare

(1) National primary ambient air quality standards, prescribed under subsection (a) of this section shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.

(2) Any national secondary ambient air quality standard prescribed under subsection (a) of this section shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. Such secondary standards may be revised in the same manner as promulgated.

(c) National primary ambient air quality standard for nitrogen dioxide

The Administrator shall, not later than one year after August 7, 1977, promulgate a national primary ambient air quality standard for NO_2 concentrations over a period of not more than 3 hours unless, based on the criteria issued under section 7408(c) of this title, he finds that there is no significant evidence that such a standard for such a period is requisite to protect public health.

(d) Review and revision of criteria and standards; independent scientific review committee; appointment; advisory functions

(1) Not later than December 31, 1980, and at five-year intervals thereafter, the Administrator shall complete a thorough review of the criteria published under section 7408 of this title and the national ambient air quality standards promulgated under this section and shall make such revisions in such criteria and standards and promulgate such new standards as may be appropriate in accordance with section 7408 of this title and subsection (b) of this section. The Adminis-

trator may review and revise criteria or promulgate new standards earlier or more frequently than required under this paragraph.

(2)(A) The Administrator shall appoint an independent scientific review committee composed of seven members including at least one member of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies.

(B) Not later than January 1, 1980, and at five-year intervals thereafter, the committee referred to in subparagraph (A) shall complete a review of the criteria published under section 7408 of this title and the national primary and secondary ambient air quality standards promulgated under this section and shall recommend to the Administrator any new national ambient air quality standards and revisions of existing criteria and standards as may be appropriate under section 7408 of this title and subsection (b) of this section.

(C) Such committee shall also (i) advise the Administrator of areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised national ambient air quality standards, (ii) describe the research efforts necessary to provide the required information, (iii) advise the Administrator on the relative contribution to air pollution concentrations of natural as well as anthropogenic activity, and (iv) advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of such national ambient air quality standards.

(July 14, 1955, c. 360, Title I, § 109, as added Dec. 31, 1970, Pub.L. 91–604, § 4(a), 84 Stat. 1679, and amended Aug. 7, 1977, Pub.L. 95–95, Title I, § 106, 91 Stat. 691.)

HISTORICAL AND STATUTORY NOTES

Codifications

Section was formerly classified to section 1857c–4 of this title.

Effective and Applicability Provisions

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Prior Provisions

A prior section 109 of Act July 14, 1955, was renumbered section 116 by Pub.L. 91–604 and is set out as section 7416 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

Role of Secondary Standards

Pub.L. 101–549, Title VIII, § 817, Nov. 15, 1990, 104 Stat. 2697, which provided for a report to Congress to be prepared by the National Academy of Sciences, relating to the role of national secondary ambient air quality standards in protecting welfare and the environment, and to be transmitted not later than 3 years after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990], terminated, effective May 15, 2000, pursuant to Pub.L. 104–66, § 3003, as amended, set out as a note under 31 U.S.C.A. § 1113, and the 6th item on page 163 of House Document No. 103–7.

Termination of Advisory Committees

Advisory committees established after Jan. 5, 1973, to terminate not later than the expiration of the two-year period beginning on the date of their establishment, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such two-year period, or in the case of a committee established by the Congress, its duration is otherwise provided for by law, see section 14 of Pub.L. 92–463, Oct. 6, 1972, 86 Stat. 776, set out in Appendix 2 to Title 5, Government Organization and Employees.

§ 7410. State implementation plans for national primary and secondary ambient air quality standards

[CAA § 110]

(a) Adoption of plan by State; submission to Administrator; content of plan; revision; new sources; indirect source review program; supplemental or intermittent control systems

(1) Each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator, within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof) under section 7409 of this title for any air pollutant, a plan which provides for implementation, maintenance, and enforcement of such primary standard in each air quality control region (or portion thereof) within such State. In addition, such State shall adopt and submit to the Administrator (either as a part of a plan submitted under the preceding sentence or separately) within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national ambient air quality secondary standard (or revision thereof), a plan which provides for implementation, maintenance, and enforcement of such secondary standard in each air quality control region (or portion thereof) within such State. Unless a separate public hearing is provided,

Codifications

Section was formerly classified to section 1857c–5 of this title.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Change of Name

The Committee on Public Works of the Senate was abolished and replaced by the Committee on Environment and Public Works of the Senate, effective Feb. 11, 1977. See Rule XXV of the Standing Rules of the Senate, as amended by Senate Resolution 4 (popularly cited as the "Committee System Reorganization Amendments of 1977"), approved Feb. 4, 1977.

Transfer of Functions

The 'Federal Energy Administrator', for purposes of this chapter, to mean the Administrator of the Federal Energy Administration established by Pub.L. 93-2q75, May 7, 1974, 88 Stat. 97, which is classified to section 761 et seq. of Title 15. Commerce and Trade, but with the term to mean any officer of the United States designated as such by the President until the Federal Energy Administrator takes office and after the Federal Energy Administration ceases to exist, see section 798 of Title 15. The Federal Energy Administration was terminated and functions vested by law in the Administrator thereof were transferred to the Secretary of Energy (unless otherwise specifically provided) by sections 7151(a) and 7293 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Suits, actions and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub.L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub.L. 95–95, see section 406(a) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

Section 16 of Pub.L. 91–604 provided that:

"(a)(1) Any implementation plan adopted by any State and submitted to the Secretary of Health, Education, and Welfare, or to the Administrator pursuant to the Clean Air Act [this chapter] prior to enactment of this Act [Dec. 31, 1970] may be approved under section 110 of the Clean Air Act [this section] (as amended by this Act) [Pub.L. 91–604] and shall remain in effect, unless the Administrator determines that such implementation plan, or any portion thereof, is not consistent with the applicable requirements of the Clean Air Act [this chapter] (as amended by this Act) and will not provide for the attainment of national primary ambient air quality standards in the time required by such Act. If the Administrator so determines, he shall, within 90 days after promulgation of any national ambient air quality standards pursuant to section 109(a) of the Clean Air Act [section 7409(a) of this title], notify the State and specify in what respects changes are needed to meet the additional requirements of such Act, including requirements to implement national secondary ambient air quality standards. If such changes are not adopted by the State after public hearings and within six months after such notification, the Administrator shall promulgate such changes pursuant to section 110(c) of such Act [subsec. (c) of this section].

"(2) The amendments made by section 4(b) [amending sections 7403 and 7415 of this title] shall not be construed as repealing or modifying the powers of the Administrator with respect to any conference convened under section 108(d) of the Clean Air Act [section 7415 of this title] before the date of enactment of this Act [Dec. 31, 1970].

"(b) Regulations or standards issued under title II of the Clean Air Act [subchapter II of this chapter] prior to the enactment of this Act [Dec. 31, 1970] shall continue in effect until revised by the Administrator consistent with the purposes of such Act [this chapter]."

Prior Provisions

A prior section 110 of Act July 14, 1955, was renumbered section 117 by Pub.L. 91–604 and is set out as section 7417 of this title.

Modification or Rescission of Implementation Plans Approved and In Effect Prior to Aug. 7, 1977

Nothing in the Clean Air Act Amendments of 1977 [Pub.L. 95–95] to affect any requirement of an approved implementation plan under this section or any other provision in effect under this chapter before Aug. 7, 1977, until modified or rescinded in accordance with this chapter as amended by the Clean Air Act Amendments of 1977, see section 406(c) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

§ 7411. Standards of performance for new stationary sources

[CAA § 111]

(a) Definitions

For purposes of this section:

(1) The term "standard of performance" means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

(2) The term "new source" means any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source.

(3) The term "stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant. Nothing in subchapter II of this chapter relating to nonroad engines shall be construed to apply to stationary internal combustion engines.

(4) The term "modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.

(5) The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(6) The term "existing source" means any stationary source other than a new source.

(7) The term "technological system of continuous emission reduction" means—

(A) a technological process for production or operation by any source which is inherently low-polluting or nonpolluting, or

(B) a technological system for continuous reduction of the pollution generated by a source before such pollution is emitted into the ambient air, including precombustion cleaning or treatment of fuels.

(8) A conversion to coal (A) by reason of an order under section 2(a) of the Energy Supply and Environmental Coordination Act of 1974 [15 U.S.C.A. § 792(a)] or any amendment thereto, or any subsequent enactment which supersedes such Act [15 U.S.C.A. § 791 et seq.], or (B) which qualifies under section 7413(d)(5)(A)(ii) of this title, shall not be deemed to be a modification for purposes of paragraphs (2) and (4) of this subsection.

(b) List of categories of stationary sources; standards of performance; information on pollution control techniques; sources owned or operated by United States; particular systems; revised standards

(1)(A) The Administrator shall, within 90 days after December 31, 1970, publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.

(B) Within one year after the inclusion of a category of stationary sources in a list under subparagraph (A), the Administrator shall publish proposed regulations, establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one year after such publication, such standards with such modifications as he deems appropriate. The Administrator shall, at least every 8 years, review and, if appropriate, revise such standards following the procedure required by this subsection for promulgation of such standards. Notwithstanding the requirements of the previous sentence, the Administrator need not review any such standard if the Administrator determines that such review is not appropriate in light of readily available information on the efficacy of such standard. Standards of performance or revisions thereof shall become effective upon promulgation. When implementation and enforcement of any requirement of this chapter indicate that emission limitations and percent reductions beyond those required by the standards promulgated under this section are achieved in practice, the Administrator shall, when revising standards promulgated under this section, consider the emission limitations and percent reductions achieved in practice.

(2) The Administrator may distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards.

(3) The Administrator shall, from time to time, issue information on pollution control techniques for categories of new sources and air pollutants subject to the provisions of this section.

(4) The provisions of this section shall apply to any new source owned or operated by the United States.

(5) Except as otherwise authorized under subsection (h) of this section, nothing in this section shall be construed to require, or to authorize the Administrator to require, any new or modified source to install and operate any particular technological system of continuous emission reduction to comply with any new source standard of performance.

(6) The revised standards of performance required by enactment of subsection (a)(1)(A)(i) and (ii) of this

section shall be promulgated not later than one year after August 7, 1977. Any new or modified fossil fuel fired stationary source which commences construction prior to the date of publication of the proposed revised standards shall not be required to comply with such revised standards.

(c) State implementation and enforcement of standards of performance

(1) Each State may develop and submit to the Administrator a procedure for implementing and enforcing standards of performance for new sources located in such State. If the Administrator finds the State procedure is adequate, he shall delegate to such State any authority he has under this chapter to implement and enforce such standards.

(2) Nothing in this subsection shall prohibit the Administrator from enforcing any applicable standard of performance under this section.

(d) Standards of performance for existing sources; remaining useful life of source

(1) The Administrator shall prescribe regulations which shall establish a procedure similar to that provided by section 7410 of this title under which each State shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source for any air pollutant (i) for which air quality criteria have not been issued or which is not included on a list published under section 7408(a) of this title or emitted from a source category which is regulated under section 7412 of this title but (ii) to which a standard of performance under this section would apply if such existing source were a new source, and (B) provides for the implementation and enforcement of such standards of performance. Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.

(2) The Administrator shall have the same authority—

(A) to prescribe a plan for a State in cases where the State fails to submit a satisfactory plan as he would have under section 7410(c) of this title in the case of failure to submit an implementation plan, and

(B) to enforce the provisions of such plan in cases where the State fails to enforce them as he would have under sections 7413 and 7414 of this title with respect to an implementation plan.

In promulgating a standard of performance under a plan prescribed under this paragraph, the Administrator shall take into consideration, among other factors, remaining useful lives of the sources in the category of sources to which such standard applies.

(e) Prohibited acts

After the effective date of standards of performance promulgated under this section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.

(f) New source standards of performance

(1) For those categories of major stationary sources that the Administrator listed under subsection (b)(1)(A) of this section before November 15, 1990, and for which regulations had not been proposed by the Administrator by November 15, 1990, the Administrator shall—

(A) propose regulations establishing standards of performance for at least 25 percent of such categories of sources within 2 years after November 15, 1990;

(B) propose regulations establishing standards of performance for at least 50 percent of such categories of sources within 4 years after November 15, 1990; and

(C) propose regulations for the remaining categories of sources within 6 years after November 15, 1990.

(2) In determining priorities for promulgating standards for categories of major stationary sources for the purpose of paragraph (1), the Administrator shall consider—

(A) the quantity of air pollutant emissions which each such category will emit, or will be designed to emit;

(B) the extent to which each such pollutant may reasonably be anticipated to endanger public health or welfare; and

(C) the mobility and competitive nature of each such category of sources and the consequent need for nationally applicable new source standards of performance.

(3) Before promulgating any regulations under this subsection or listing any category of major stationary sources as required under this subsection, the Administrator shall consult with appropriate representatives of the Governors and of State air pollution control agencies.

(g) Revision of regulations

(1) Upon application by the Governor of a State showing that the Administrator has failed to specify in regulations under subsection (f)(1) of this section any category of major stationary sources required to be specified under such regulations, the Administrator

shall revise such regulations to specify any such category.

(2) Upon application of the Governor of a State, showing that any category of stationary sources which is not included in the list under subsection (b)(1)(A) of this section contributes significantly to air pollution which may reasonably be anticipated to endanger public health or welfare (notwithstanding that such category is not a category of major stationary sources), the Administrator shall revise such regulations to specify such category of stationary sources.

(3) Upon application of the Governor of a State showing that the Administrator has failed to apply properly the criteria required to be considered under subsection (f)(2) of this section, the Administrator shall revise the list under subsection (b)(1)(A) of this section to apply properly such criteria.

(4) Upon application of the Governor of a State showing that—

(A) a new, innovative, or improved technology or process which achieves greater continuous emission reduction has been adequately demonstrated for any category of stationary sources, and

(B) as a result of such technology or process, the new source standard of performance in effect under this section for such category no longer reflects the greatest degree of emission limitation achievable through application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impact and energy requirements) has been adequately demonstrated,

the Administrator shall revise such standard of performance for such category accordingly.

(5) Unless later deadlines for action of the Administrator are otherwise prescribed under this section, the Administrator shall, not later than three months following the date of receipt of any application by a Governor of a State, either—

(A) find that such application does not contain the requisite showing and deny such application, or

(B) grant such application and take the action required under this subsection.

(6) Before taking any action required by subsection (f) of this section or by this subsection, the Administrator shall provide notice and opportunity for public hearing.

(h) Design, equipment, work practice, or operational standard; alternative emission limitation

(1) For purposes of this section, if in the judgment of the Administrator, it is not feasible to prescribe or enforce a standard of performance, he may instead promulgate a design, equipment, work practice, or operational standard, or combination thereof, which reflects the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. In the event the Administrator promulgates a design or equipment standard under this subsection, he shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(2) For the purpose of this subsection, the phrase "not feasible to prescribe or enforce a standard of performance" means any situation in which the Administrator determines that (A) a pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State, or local law, or (B) the application of measurement methodology to a particular class of sources is not practicable due to technological or economic limitations.

(3) If after notice and opportunity for public hearing, any person establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such air pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

(4) Any standard promulgated under paragraph (1) shall be promulgated in terms of standard of performance whenever it becomes feasible to promulgate and enforce such standard in such terms.

(5) Any design, equipment, work practice, or operational standard, or any combination thereof, described in this subsection shall be treated as a standard of performance for purposes of the provisions of this chapter (other than the provisions of subsection (a) of this section and this subsection).

(i) Country elevators

Any regulations promulgated by the Administrator under this section applicable to grain elevators shall not apply to country elevators (as defined by the Administrator) which have a storage capacity of less than two million five hundred thousand bushels.

(j) Innovative technological systems of continuous emission reduction

(1)(A) Any person proposing to own or operate a new source may request the Administrator for one or more waivers from the requirements of this section for such source or any portion thereof with respect to any air pollutant to encourage the use of an innovative technological system or systems of continuous emission reduction. The Administrator may, with the consent of the Governor of the State in which the source is to be located, grant a waiver under this paragraph, if the Administrator determines after notice and opportunity for public hearing, that—

(i) the proposed system or systems have not been adequately demonstrated,

(ii) the proposed system or systems will operate effectively and there is a substantial likelihood that such system or systems will achieve greater continuous emission reduction than that required to be achieved under the standards of performance which would otherwise apply, or achieve at least an equivalent reduction at lower cost in terms of energy, economic, or nonair quality environmental impact,

(iii) the owner or operator of the proposed source has demonstrated to the satisfaction of the Administrator that the proposed system will not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation, function, or malfunction, and

(iv) the granting of such waiver is consistent with the requirements of subparagraph (C).

In making any determination under clause (ii), the Administrator shall take into account any previous failure of such system or systems to operate effectively or to meet any requirement of the new source performance standards. In determining whether an unreasonable risk exists under clause (iii), the Administrator shall consider, among other factors, whether and to what extent the use of the proposed technological system will cause, increase, reduce, or eliminate emissions of any unregulated pollutants; available methods for reducing or eliminating any risk to public health, welfare, or safety which may be associated with the use of such system; and the availability of other technological systems which may be used to conform to standards under this section without causing or contributing to such unreasonable risk. The Administrator may conduct such tests and may require the owner or operator of the proposed source to conduct such tests and provide such information as is necessary to carry out clause (iii) of this subparagraph. Such requirements shall include a requirement for prompt reporting of the emission of any unregulated pollutant from a system if such pollutant was not emitted, or was emitted in significantly lesser amounts without use of such system.

(B) A waiver under this paragraph shall be granted on such terms and conditions as the Administrator determines to be necessary to assure—

(i) emissions from the source will not prevent attainment and maintenance of any national ambient air quality standards, and

(ii) proper functioning of the technological system or systems authorized.

Any such term or condition shall be treated as a standard of performance for the purposes of subsection (e) of this section and section 7413 of this title.

(C) The number of waivers granted under this paragraph with respect to a proposed technological system of continuous emission reduction shall not exceed such number as the Administrator finds necessary to ascertain whether or not such system will achieve the conditions specified in clauses (ii) and (iii) of subparagraph (A).

(D) A waiver under this paragraph shall extend to the sooner of—

(i) the date determined by the Administrator, after consultation with the owner or operator of the source, taking into consideration the design, installation, and capital cost of the technological system or systems being used, or

(ii) the date on which the Administrator determines that such system has failed to—

(I) achieve at least an equivalent continuous emission reduction to that required to be achieved under the standards of performance which would otherwise apply, or

(II) comply with the condition specified in paragraph (1)(A)(iii),

and that such failure cannot be corrected.

(E) In carrying out subparagraph (D)(i), the Administrator shall not permit any waiver for a source or portion thereof to extend beyond the date—

(i) seven years after the date on which any waiver is granted to such source or portion thereof, or

(ii) four years after the date on which such source or portion thereof commences operation,

whichever is earlier.

(F) No waiver under this subsection shall apply to any portion of a source other than the portion on which the innovative technological system or systems of continuous emission reduction is used.

(2)(A) If a waiver under paragraph (1) is terminated under clause (ii) of paragraph (1)(D), the Administrator shall grant an extension of the requirements of this section for such source for such minimum period as may be necessary to comply with the applicable standard of performance under this section. Such period shall not extend beyond the date three years from the time such waiver is terminated.

(B) An extension granted under this paragraph shall set forth emission limits and a compliance schedule containing increments of progress which require compliance with the applicable standards of performance as expeditiously as practicable and include such measures as are necessary and practicable in the interim to minimize emissions. Such schedule shall be treated as a standard of performance for purposes of subsection (e) of this section and section 7413 of this title.

(July 14, 1955, c. 360, Title I, § 111, as added Dec. 31, 1970, Pub.L. 91–604, § 4(a), 84 Stat. 1683, and amended Nov. 18, 1971, Pub.L. 92–157, Title III, § 302(f), 85 Stat. 464; Aug. 7, 1977, Pub.L. 95–95, Title I, § 109(a)–(d)(1), (e), (f), Title IV, § 401(b), 91 Stat. 697 to 703, 791; Nov. 16, 1977, Pub.L. 95–190, § 14(a)(7) to (9), 91 Stat. 1399; Nov. 9, 1978, Pub.L. 95–623, § 13(a), 92 Stat. 3457; Nov. 15, 1990, Pub.L. 101–549, Title I, § 108(e) to (g), Title III, § 302(a), (b), Title IV, § 403(a), 104 Stat. 2467, 2574, 2631.)

HISTORICAL AND STATUTORY NOTES

References in Text

Such Act, referred to in subsec. (a)(8), means Pub.L. 93–319, June 22, 1974, 88 Stat. 246, as amended, known as the Energy Supply and Environmental Coordination Act of 1974, which is classified principally to chapter 16C (section 791 et seq.) of Title 15, Commerce and Trade. For complete classification of this Act to the Code, see Short Title note set out under section 791 of Title 15 and Tables.

Section 7413 of this title, referred to in subsec. (a)(8), was amended generally by Pub.L. 101–549, Title VII, § 701, Nov. 15, 1990, 104 Stat. 2672, and, as so amended, subsec. (d) of section 7413 no longer relates to final compliance orders.

Subsec. (a)(1) of this section, referred to in subsec. (b)(6), was amended generally by Pub.L. 101–549, Title IV, § 403(a), Nov. 15, 1990, 104 Stat. 2631, and, as so amended, no longer contains subpars.

Codifications

Section was formerly classified to section 1857c–6 of this title.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Transfer of Functions

Enforcement functions of Administrator or other official in Environmental Protection Agency related to compliance with new source performance standards under this section with respect to pre-construction, construction, and initial operation of transportation system for Canadian and Alaskan natural gas transferred to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, until first anniversary of date of initial operation of Alaska Natural Gas Transportation System, see Reorg. Plan No. 1 of 1979, eff. July 1, 1979, §§ 102(a), 203(a), 44 F.R. 33663, 33666, 93 Stat. 1373, 1376, set out in Appendix 1 to Title 5, Government Organization and Employees Office of Federal Inspector for the Alaska Natural Gas Transportation System abolished and functions and authority vested in Inspector transferred to Secretary of Energy by section 3012(b) of Pub.L. 102–486, set out as an Abolition of Office of Federal Inspector note under section 719e of Title 15, Commerce and Trade.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub.L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub.L. 95–95, see section 406(a) of Pub.L. 95–95, set out as an Effective and Applicability Provisions note under section 7401 of this title.

Prior Provisions

A prior section 111 of Act July 14, 1955, was renumbered section 118 by Pub.L. 91–604, and is set out as section 7418 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective Date note under section 7401 of this title.

Revised Regulations; Applicability

Section 403(b), (c) of Pub.L. 101–549 provided that:

"**(b) Revised regulations.**—Not later than three years after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990], the Administrator shall promulgate revised regulations for standards of performance for new fossil fuel fired electric utility units commencing construction after the date on which such regulations are proposed that, at a minimum, require any source subject to such revised standards to emit sulfur dioxide at a rate not greater than would have resulted from compliance by such source with the applicable standards of performance under this section [amending sections 9411 and 7479 of this title] prior to such revision.

"**(c) Applicability.**—The provisions of subsections (a) [amending subsec. (a)(1) of this section] and (b) [subsec. (b) of this note] apply only so long as the provisions of section 403(e) of the Clean Air Act [section 7651b(e) of this title] remain in effect."

§ 7412. Hazardous air pollutants

[CAA § 112]

(a) Definitions

For purposes of this section, except subsection (r) of this section—

(1) Major source

The term "major source" means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The Administrator may establish a lesser quantity, or in the case of radionuclides different criteria, for a major source than that specified in the previous sentence, on the basis of the potency of the air pollutant, persistence, potential for bioaccumulation, other characteristics of the air pollutant, or other relevant factors.

(2) Area source

The term "area source" means any stationary source of hazardous air pollutants that is not a major source. For purposes of this section, the term "area source" shall not include motor vehicles or nonroad vehicles subject to regulation under subchapter II of this chapter.

(3) Stationary source

The term "stationary source" shall have the same meaning as such term has under section 7411(a) of this title.

(4) New source

The term "new source" means a stationary source the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emission standard applicable to such source.

(5) Modification

The term "modification" means any physical change in, or change in the method of operation of, a major source which increases the actual emissions of any hazardous air pollutant emitted by such source by more than a de minimis amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimis amount.

(6) Hazardous air pollutant

The term "hazardous air pollutant" means any air pollutant listed pursuant to subsection (b) of this section.

(7) Adverse environmental effect

The term "adverse environmental effect" means any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.

(8) Electric utility steam generating unit

The term "electric utility steam generating unit" means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

(9) Owner or operator

The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(10) Existing source

The term "existing source" means any stationary source other than a new source.

(11) Carcinogenic effect

Unless revised, the term "carcinogenic effect" shall have the meaning provided by the Administrator under Guidelines for Carcinogenic Risk Assessment as of the date of enactment. Any revisions in the existing Guidelines shall be subject to notice and opportunity for comment.

(b) List of pollutants

(1) Initial list

The Congress establishes for purposes of this section a list of hazardous air pollutants as follows:

CAS number	Chemical name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2–Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4–Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)

CAS number	Chemical name
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
105602	Caprolactam
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde

CAS number	Chemical name
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2–Dichloropropane)
75569	Propylene oxide
75558	1,2–Propylenimine (2–Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8–Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2–Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4–Toluene diamine
584849	2,4–Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4–Trichlorobenzene
79005	1,1,2–Trichloroethane
79016	Trichloroethylene
95954	2,4,5–Trichlorophenol
88062	2,4,6–Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4–Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1–Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes
0	Antimony Compounds
0	Arsenic Compounds (inorganic including arsine)
0	Beryllium Compounds
0	Cadmium Compounds
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds [1]
0	Glycol ethers [2]
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers [3]
0	Nickel Compounds
0	Polycyclic Organic Matter [4]
0	Radionuclides (including radon) [5]
0	Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

[1] X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)$_2$

[2] Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R–(OCH$_2$CH$_2$)$_n$–OR' where

n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R–(OCH$_2$CH)$_n$–OH. Polymers are excluded from the glycol category.

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[4] Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

[5] A type of atom which spontaneously undergoes radioactive decay.

(2) Revision of the list

The Administrator shall periodically review the list established by this subsection and publish the results thereof and, where appropriate, revise such list by rule, adding pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects (including, but not limited to, substances which are known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction, or which are acutely or chronically toxic) or adverse environmental effects whether through ambient concentrations, bioaccumulation, deposition, or otherwise, but not including releases subject to regulation under subsection (r) of this section as a result of emissions to the air. No air pollutant which is listed under section 7408(a) of this title may be added to the list under this section, except that the prohibition of this sentence shall not apply to any pollutant which independently meets the listing criteria of this paragraph and is a precursor to a pollutant which is listed under section 7408(a) of this title or to any pollutant which is in a class of pollutants listed under such section. No substance, practice, process or activity regulated under subchapter VI of this chapter shall be subject to regulation under this section solely due to its adverse effects on the environment.

(3) Petitions to modify the list

(A) Beginning at any time after 6 months after November 15, 1990, any person may petition the Administrator to modify the list of hazardous air pollutants under this subsection by adding or deleting a substance or, in case of listed pollutants without CAS numbers (other than coke oven emissions, mineral fibers, or polycyclic organic matter) removing certain unique substances. Within 18 months after receipt of a petition, the Administrator shall either grant or deny the petition by publishing a written explanation of the reasons for the Administrator's decision. Any such petition shall include a showing by the petitioner that there is adequate data on the health or environmental defects [1] of the pollutant or other evidence adequate to support the petition. The Administrator may not deny a petition solely on the basis of inadequate resources or time for review.

(B) The Administrator shall add a substance to the list upon a showing by the petitioner or on the Administrator's own determination that the substance is an air pollutant and that emissions, ambient concentrations, bioaccumulation or deposition of the substance are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects.

(C) The Administrator shall delete a substance from the list upon a showing by the petitioner or on the Administrator's own determination that there is adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation or deposition of the substance may not reasonably be anticipated to cause any adverse effects to the human health or adverse environmental effects.

(D) The Administrator shall delete one or more unique chemical substances that contain a listed hazardous air pollutant not having a CAS number (other than coke oven emissions, mineral fibers, or polycyclic organic matter) upon a showing by the petitioner or on the Administrator's own determination that such unique chemical substances that contain the named chemical of such listed hazardous air pollutant meet the deletion requirements of subparagraph (C). The Administrator must grant or deny a deletion petition prior to promulgating any emission standards pursuant to subsection (d) of this section applicable to any source category or subcategory of a listed hazardous air pollutant without a CAS number listed under subsection (b) of this section for which a deletion petition has been filed within 12 months of November 15, 1990.

(4) Further information

If the Administrator determines that information on the health or environmental effects of a substance is not sufficient to make a determination required by this subsection, the Administrator may use any authority available to the Administrator to acquire such information.

(5) Test methods

The Administrator may establish, by rule, test measures and other analytic procedures for monitoring and measuring emissions, ambient concentrations, deposition, and bioaccumulation of hazardous air pollutants.

(6) Prevention of significant deterioration

The provisions of part C of this subchapter (prevention of significant deterioration) shall not apply to pollutants listed under this section.

(7) Lead

The Administrator may not list elemental lead as a hazardous air pollutant under this subsection.

(c) List of source categories

(1) In general

Not later than 12 months after November 15, 1990, the Administrator shall publish, and shall from time to time, but no less often than every 8 years, revise, if appropriate, in response to public comment or new information, a list of all categories and subcategories of major sources and area sources (listed under paragraph (3)) of the air pollutants listed pursuant to subsection (b) of this section. To the extent practicable, the categories and subcategories listed under this subsection shall be consistent with the list of source categories established pursuant to section 7411 of this title and part C of this subchapter. Nothing in the preceding sentence limits the Administrator's authority to establish subcategories under this section, as appropriate.

(2) Requirement for emissions standards

For the categories and subcategories the Administrator lists, the Administrator shall establish emissions standards under subsection (d) of this section, according to the schedule in this subsection and subsection (e) of this section.

(3) Area sources

The Administrator shall list under this subsection each category or subcategory of area sources which the Administrator finds presents a threat of adverse effects to human health or the environment (by such sources individually or in the aggregate) warranting regulation under this section. The Administrator shall, not later than 5 years after November 15, 1990, and pursuant to subsection (k)(3)(B) of this section, list, based on actual or estimated aggregate emissions of a listed pollutant or pollutants, sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas are subject to regulation under this section. Such regulations shall be promulgated not later than 10 years after November 15, 1990.

(4) Previously regulated categories

The Administrator may, in the Administrator's discretion, list any category or subcategory of sources previously regulated under this section as in effect before November 15, 1990.

(5) Additional categories

In addition to those categories and subcategories of sources listed for regulation pursuant to paragraphs (1) and (3), the Administrator may at any time list additional categories and subcategories of sources of hazardous air pollutants according to the same criteria for listing applicable under such paragraphs. In the case of source categories and subcategories listed after publication of the initial list required under paragraph (1) or (3), emission standards under subsection (d) of this section for the category or subcategory shall be promulgated within 10 years after November 15, 1990, or within 2 years after the date on which such category or subcategory is listed, whichever is later.

(6) Specific pollutants

With respect to alkylated lead compounds, polycyclic organic matter, hexachlorobenzene, mercury, polychlorinated biphenyls, 2,3,7,8–tetrachlorodibenzofurans and 2,3,7,8–tetrachlorodibenzo-p-dioxin, the Administrator shall, not later than 5 years after November 15, 1990, list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section. Such standards shall be promulgated not later than 10 years after November 15, 1990. This paragraph shall not be construed to require the Administrator to promulgate standards for such pollutants emitted by electric utility steam generating units.

(7) Research facilities

The Administrator shall establish a separate category covering research or laboratory facilities, as necessary to assure the equitable treatment of such facilities. For purposes of this section, "research or laboratory facility" means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

(8) Boat manufacturing

When establishing emissions standards for styrene, the Administrator shall list boat manufacturing as a separate subcategory unless the Administrator finds that such listing would be inconsistent with the goals and requirements of this chapter.

(9) Deletions from the list

(A) Where the sole reason for the inclusion of a source category on the list required under this subsection is the emission of a unique chemical substance, the Administrator shall delete the source category from the list if it is appropriate because of action taken under either subparagraphs (C) or (D) of subsection (b)(3) of this section.

(B) The Administrator may delete any source category from the list under this subsection, on petition of any person or on the Administrator's own motion, whenever the Administrator makes the following determination or determinations, as applicable:

(i) In the case of hazardous air pollutants emitted by sources in the category that may result in cancer in humans, a determination that no source in the category (or group of sources in the case of area sources) emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source (or group of sources in the case of area sources).

(ii) In the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer or adverse environmental effects, a determination that emissions from no source in the category or subcategory concerned (or group of sources in the case of area sources) exceed a level which is adequate to protect public health with an ample margin of safety and no adverse environmental effect will result from emissions from any source (or from a group of sources in the case of area sources).

The Administrator shall grant or deny a petition under this paragraph within 1 year after the petition is filed.

(d) Emission standards

(1) In general

The Administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation pursuant to subsection (c) of this section in accordance with the schedules provided in subsections (c) and (e) of this section. The Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards except that, there shall be no delay in the compliance date for any standard applicable to any source under subsection (i) of this section as the result of the authority provided by this sentence.

(2) Standards and methods

Emissions standards promulgated under this subsection and applicable to new or existing sources of hazardous air pollutants shall require the maximum degree of reduction in emissions of the hazardous

air pollutants subject to this section (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies, through application of measures, processes, methods, systems or techniques including, but not limited to, measures which—

(A) reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications,

(B) enclose systems or processes to eliminate emissions,

(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point,

(D) are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in subsection (h) of this section, or

(E) are a combination of the above.

None of the measures described in subparagraphs (A) through (D) shall, consistent with the provisions of section 7414(c) of this title, in any way compromise any United States patent or United States trademark right, or any confidential business information, or any trade secret or any other intellectual property right.

(3) New and existing sources

The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than—

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by section 7501 of this title) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

(4) Health threshold

With respect to pollutants for which a health threshold has been established, the Administrator may consider such threshold level, with an ample margin of safety, when establishing emission standards under this subsection.

(5) Alternative standard for area sources

With respect only to categories and subcategories of area sources listed pursuant to subsection (c) of this section, the Administrator may, in lieu of the authorities provided in paragraph (2) and subsection (f) of this section, elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.

(6) Review and revision

The Administrator shall review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years.

(7) Other requirements preserved

No emission standard or other requirement promulgated under this section shall be interpreted, construed or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established pursuant to section 7411 of this title, part C or D of this subchapter, or other authority of this chapter or a standard issued under State authority.

(8) Coke ovens

(A) Not later than December 31, 1992, the Administrator shall promulgate regulations establishing emission standards under paragraphs (2) and (3) of this subsection for coke oven batteries. In establishing such standards, the Administrator shall evaluate—

(i) the use of sodium silicate (or equivalent) luting compounds to prevent door leaks, and other operating practices and technologies for their effectiveness in reducing coke oven emissions, and their suitability for use on new and existing

coke oven batteries, taking into account costs and reasonable commercial door warranties; and

(ii) as a basis for emission standards under this subsection for new coke oven batteries that begin construction after the date of proposal of such standards, the Jewell design Thompson non-recovery coke oven batteries and other non-recovery coke oven technologies, and other appropriate emission control and coke production technologies, as to their effectiveness in reducing coke oven emissions and their capability for production of steel quality coke.

Such regulations shall require at a minimum that coke oven batteries will not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 16 seconds visible emissions per charge, with no exclusion for emissions during the period after the closing of self-sealing oven doors. Notwithstanding subsection (i) of this section, the compliance date for such emission standards for existing coke oven batteries shall be December 31, 1995.

(B) The Administrator shall promulgate work practice regulations under this subsection for coke oven batteries requiring, as appropriate—

(i) the use of sodium silicate (or equivalent) luting compounds, if the Administrator determines that use of sodium silicate is an effective means of emissions control and is achievable, taking into account costs and reasonable commercial warranties for doors and related equipment; and

(ii) door and jam cleaning practices.

Notwithstanding subsection (i) of this section, the compliance date for such work practice regulations for coke oven batteries shall be not later than the date 3 years after November 15, 1990.

(C) For coke oven batteries electing to qualify for an extension of the compliance date for standards promulgated under subsection (f) of this section in accordance with subsection (i)(8) of this section, the emission standards under this subsection for coke oven batteries shall require that coke oven batteries not exceed 8 per centum leaking doors, 1 per centum leaking lids, 5 per centum leaking offtakes, and 16 seconds visible emissions per charge, with no exclusion for emissions during the period after the closing of self-sealing doors. Notwithstanding subsection (i) of this section, the compliance date for such emission standards for existing coke oven batteries seeking an extension shall be not later than the date 3 years after November 15, 1990.

(9) Sources licensed by the Nuclear Regulatory Commission

No standard for radionuclide emissions from any category or subcategory of facilities licensed by the Nuclear Regulatory Commission (or an Agreement State) is required to be promulgated under this section if the Administrator determines, by rule, and after consultation with the Nuclear Regulatory Commission, that the regulatory program established by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act [42 U.S.C.A. § 2011 et seq.] for such category or subcategory provides an ample margin of safety to protect the public health. Nothing in this subsection shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation in effect under section 7411 of this title or this section.

(10) Effective date

Emission standards or other regulations promulgated under this subsection shall be effective upon promulgation.

(e) Schedule for standards and review

(1) In general

The Administrator shall promulgate regulations establishing emission standards for categories and subcategories of sources initially listed for regulation pursuant to subsection (c)(1) of this section as expeditiously as practicable, assuring that—

(A) emission standards for not less than 40 categories and subcategories (not counting coke oven batteries) shall be promulgated not later than 2 years after November 15, 1990;

(B) emission standards for coke oven batteries shall be promulgated not later than December 31, 1992;

(C) emission standards for 25 per centum of the listed categories and subcategories shall be promulgated not later than 4 years after November 15, 1990;

(D) emission standards for an additional 25 per centum of the listed categories and subcategories shall be promulgated not later than 7 years after November 15, 1990; and

(E) emission standards for all categories and subcategories shall be promulgated not later than 10 years after November 15, 1990.

(2) Priorities

In determining priorities for promulgating standards under subsection (d) of this section, the Administrator shall consider—

(A) the known or anticipated adverse effects of such pollutants on public health and the environment;

(B) the quantity and location of emissions or reasonably anticipated emissions of hazardous air

pollutants that each category or subcategory will emit; and

(C) the efficiency of grouping categories or subcategories according to the pollutants emitted, or the processes or technologies used.

(3) Published schedule

Not later than 24 months after November 15, 1990, and after opportunity for comment, the Administrator shall publish a schedule establishing a date for the promulgation of emission standards for each category and subcategory of sources listed pursuant to subsection (c)(1) and (3) of this section which shall be consistent with the requirements of paragraphs (1) and (2). The determination of priorities for the promulgation of standards pursuant to this paragraph is not a rulemaking and shall not be subject to judicial review, except that, failure to promulgate any standard pursuant to the schedule established by this paragraph shall be subject to review under section 7604 of this title.

(4) Judicial review

Notwithstanding section 7607 of this title, no action of the Administrator adding a pollutant to the list under subsection (b) of this section or listing a source category or subcategory under subsection (c) of this section shall be a final agency action subject to judicial review, except that any such action may be reviewed under such section 7607 of this title when the Administrator issues emission standards for such pollutant or category.

(5) Publicly owned treatment works

The Administrator shall promulgate standards pursuant to subsection (d) of this section applicable to publicly owned treatment works (as defined in title II of the Federal Water Pollution Control Act [33 U.S.C.A. § 1281 et seq.]) not later than 5 years after November 15, 1990.

(f) Standard to protect health and environment

(1) Report

Not later than 6 years after November 15, 1990, the Administrator shall investigate and report, after consultation with the Surgeon General and after opportunity for public comment, to Congress on—

(A) methods of calculating the risk to public health remaining, or likely to remain, from sources subject to regulation under this section after the application of standards under subsection (d) of this section;

(B) the public health significance of such estimated remaining risk and the technologically and commercially available methods and costs of reducing such risks;

(C) the actual health effects with respect to persons living in the vicinity of sources, any available epidemiological or other health studies, risks presented by background concentrations of hazardous air pollutants, any uncertainties in risk assessment methodology or other health assessment technique, and any negative health or environmental consequences to the community of efforts to reduce such risks; and

(D) recommendations as to legislation regarding such remaining risk.

(2) Emission standards

(A) If Congress does not act on any recommendation submitted under paragraph (1), the Administrator shall, within 8 years after promulgation of standards for each category or subcategory of sources pursuant to subsection (d) of this section, promulgate standards for such category or subcategory if promulgation of such standards is required in order to provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990) or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. Emission standards promulgated under this subsection shall provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990), unless the Administrator determines that a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. If standards promulgated pursuant to subsection (d) of this section, and applicable to a category or subcategory of sources emitting a pollutant (or pollutants) classified as a known, probable or possible human carcinogen do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in one million, the Administrator shall promulgate standards under this subsection for such source category.

(B) Nothing in subparagraph (A) or in any other provision of this section shall be construed as affecting, or applying to the Administrator's interpretation of this section, as in effect before November 15, 1990, and set forth in the Federal Register of September 14, 1989 (54 Federal Register 38044).

(C) The Administrator shall determine whether or not to promulgate such standards and, if the Administrator decides to promulgate such standards, shall promulgate the standards 8 years after promulgation of the standards under subsection (d) of this section for each source category or subcategory concerned. In the case of categories or subcategories for which standards under subsection (d) of this section are required to be promulgated within 2 years after November 15, 1990, the Administrator

shall have 9 years after promulgation of the standards under subsection (d) of this section to make the determination under the preceding sentence and, if required, to promulgate the standards under this paragraph.

(3) Effective date

Any emission standard established pursuant to this subsection shall become effective upon promulgation.

(4) Prohibition

No air pollutant to which a standard under this subsection applies may be emitted from any stationary source in violation of such standard, except that in the case of an existing source—

(A) such standard shall not apply until 90 days after its effective date, and

(B) the Administrator may grant a waiver permitting such source a period of up to 2 years after the effective date of a standard to comply with the standard if the Administrator finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

(5) Area sources

The Administrator shall not be required to conduct any review under this subsection or promulgate emission limitations under this subsection for any category or subcategory of area sources that is listed pursuant to subsection (c)(3) of this section and for which an emission standard is promulgated pursuant to subsection (d)(5) of this section.

(6) Unique chemical substances

In establishing standards for the control of unique chemical substances of listed pollutants without CAS numbers under this subsection, the Administrator shall establish such standards with respect to the health and environmental effects of the substances actually emitted by sources and direct transformation byproducts of such emissions in the categories and subcategories.

(g) Modifications

(1) Offsets

(A) A physical change in, or change in the method of operation of, a major source which results in a greater than de minimis increase in actual emissions of a hazardous air pollutant shall not be considered a modification, if such increase in the quantity of actual emissions of any hazardous air pollutant from such source will be offset by an equal or greater decrease in the quantity of emissions of another hazardous air pollutant (or pollutants) from such source which is deemed more hazardous, pursuant to guidance issued by the Administrator under subparagraph (B). The owner or operator of such source shall submit a showing to the Administrator (or the State) that such increase has been offset under the preceding sentence.

(B) The Administrator shall, after notice and opportunity for comment and not later than 18 months after November 15, 1990, publish guidance with respect to implementation of this subsection. Such guidance shall include an identification, to the extent practicable, of the relative hazard to human health resulting from emissions to the ambient air of each of the pollutants listed under subsection (b) of this section sufficient to facilitate the offset showing authorized by subparagraph (A). Such guidance shall not authorize offsets between pollutants where the increased pollutant (or more than one pollutant in a stream of pollutants) causes adverse effects to human health for which no safety threshold for exposure can be determined unless there are corresponding decreases in such types of pollutant(s).

(2) Construction, reconstruction and modifications

(A) After the effective date of a permit program under subchapter V of this chapter in any State, no person may modify a major source of hazardous air pollutants in such State, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for existing sources will be met. Such determination shall be made on a case-by-case basis where no applicable emissions limitations have been established by the Administrator.

(B) After the effective date of a permit program under subchapter V of this chapter in any State, no person may construct or reconstruct any major source of hazardous air pollutants, unless the Administrator (or the State) determines that the maximum achievable control technology emission limitation under this section for new sources will be met. Such determination shall be made on a case-by-case basis where no applicable emission limitations have been established by the Administrator.

(3) Procedures for modifications

The Administrator (or the State) shall establish reasonable procedures for assuring that the requirements applying to modifications under this section are reflected in the permit.

(h) Work practice standards and other requirements

(1) In general

For purposes of this section, if it is not feasible in the judgment of the Administrator to prescribe or

enforce an emission standard for control of a hazardous air pollutant or pollutants, the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in the Administrator's judgment is consistent with the provisions of subsection (d) or (f) of this section. In the event the Administrator promulgates a design or equipment standard under this subsection, the Administrator shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(2) Definition

For the purpose of this subsection, the phrase "not feasible to prescribe or enforce an emission standard" means any situation in which the Administrator determines that—

(A) a hazardous air pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State or local law, or

(B) the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.

(3) Alternative standard

If after notice and opportunity for comment, the owner or operator of any source establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

(4) Numerical standard required

Any standard promulgated under paragraph (1) shall be promulgated in terms of an emission standard whenever it is feasible to promulgate and enforce a standard in such terms.

(i) Schedule for compliance

(1) Preconstruction and operating requirements

After the effective date of any emission standard, limitation, or regulation under subsection (d), (f) or (h) of this section, no person may construct any new major source or reconstruct any existing major source subject to such emission standard, regulation or limitation unless the Administrator (or a State with a permit program approved under subchapter V of this chapter) determines that such source, if properly constructed, reconstructed and operated, will comply with the standard, regulation or limitation.

(2) Special rule

Notwithstanding the requirements of paragraph (1), a new source which commences construction or reconstruction after a standard, limitation or regulation applicable to such source is proposed and before such standard, limitation or regulation is promulgated shall not be required to comply with such promulgated standard until the date 3 years after the date of promulgation if—

(A) the promulgated standard, limitation or regulation is more stringent than the standard, limitation or regulation proposed; and

(B) the source complies with the standard, limitation, or regulation as proposed during the 3-year period immediately after promulgation.

(3) Compliance schedule for existing sources

(A) After the effective date of any emissions standard, limitation or regulation promulgated under this section and applicable to a source, no person may operate such source in violation of such standard, limitation or regulation except, in the case of an existing source, the Administrator shall establish a compliance date or dates for each category or subcategory of existing sources, which shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the effective date of such standard, except as provided in subparagraph (B) and paragraphs (4) through (8).

(B) The Administrator (or a State with a program approved under subchapter V of this chapter) may issue a permit that grants an extension permitting an existing source up to 1 additional year to comply with standards under subsection (d) of this section if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 4-year compliance time is insufficient to dry and cover mining waste in order to reduce emissions of any pollutant listed under subsection (b) of this section.

(4) Presidential exemption

The President may exempt any stationary source from compliance with any standard or limitation under this section for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years. The President shall report to Congress with respect to

each exemption (or extension thereof) made under this paragraph.

(5) Early reduction

(A) The Administrator (or a State acting pursuant to a permit program approved under subchapter V of this chapter) shall issue a permit allowing an existing source, for which the owner or operator demonstrates that the source has achieved a reduction of 90 per centum or more in emissions of hazardous air pollutants (95 per centum in the case of hazardous air pollutants which are particulates) from the source, to meet an alternative emission limitation reflecting such reduction in lieu of an emission limitation promulgated under subsection (d) of this section for a period of 6 years from the compliance date for the otherwise applicable standard, provided that such reduction is achieved before the otherwise applicable standard under subsection (d) of this section is first proposed. Nothing in this paragraph shall preclude a State from requiring reductions in excess of those specified in this subparagraph as a condition of granting the extension authorized by the previous sentence.

(B) An existing source which achieves the reduction referred to in subparagraph (A) after the proposal of an applicable standard but before January 1, 1994, may qualify under subparagraph (A), if the source makes an enforceable commitment to achieve such reduction before the proposal of the standard. Such commitment shall be enforceable to the same extent as a regulation under this section.

(C) The reduction shall be determined with respect to verifiable and actual emissions in a base year not earlier than calendar year 1987, provided that, there is no evidence that emissions in the base year are artificially or substantially greater than emissions in other years prior to implementation of emissions reduction measures. The Administrator may allow a source to use a baseline year of 1985 or 1986 provided that the source can demonstrate to the satisfaction of the Administrator that emissions data for the source reflects verifiable data based on information for such source, received by the Administrator prior to November 15, 1990, pursuant to an information request issued under section 7414 of this title.

(D) For each source granted an alternative emission limitation under this paragraph there shall be established by a permit issued pursuant to subchapter V of this chapter an enforceable emission limitation for hazardous air pollutants reflecting the reduction which qualifies the source for an alternative emission limitation under this paragraph. An alternative emission limitation under this paragraph shall not be available with respect to standards or requirements promulgated pursuant to subsection (f) of this section and the Administrator shall, for the purpose of determining whether a standard under subsection (f) of this section is necessary, review emissions from sources granted an alternative emission limitation under this paragraph at the same time that other sources in the category or subcategory are reviewed.

(E) With respect to pollutants for which high risks of adverse public health effects may be associated with exposure to small quantities including, but not limited to, chlorinated dioxins and furans, the Administrator shall by regulation limit the use of offsetting reductions in emissions of other hazardous air pollutants from the source as counting toward the 90 per centum reduction in such high-risk pollutants qualifying for an alternative emissions limitation under this paragraph.

(6) Other reductions

Notwithstanding the requirements of this section, no existing source that has installed—

(A) best available control technology (as defined in section 7479(3) of this title), or

(B) technology required to meet a lowest achievable emission rate (as defined in section 7501 of this title),

prior to the promulgation of a standard under this section applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to an action described in subparagraph (A) or (B) shall be required to comply with such standard under this section until the date 5 years after the date on which such installation or reduction has been achieved, as determined by the Administrator. The Administrator may issue such rules and guidance as are necessary to implement this paragraph.

(7) Extension for new sources

A source for which construction or reconstruction is commenced after the date an emission standard applicable to such source is proposed pursuant to subsection (d) of this section but before the date an emission standard applicable to such source is proposed pursuant to subsection (f) of this section shall not be required to comply with the emission standard under subsection (f) of this section until the date 10 years after the date construction or reconstruction is commenced.

(8) Coke ovens

(A) Any coke oven battery that complies with the emission limitations established under subsection (d)(8)(C) of this section, subparagraph (B), and subparagraph (C), and complies with the provisions of subparagraph (E), shall not be required to achieve emission limitations promulgated under subsection (f) of this section until January 1, 2020.

(B)(i) Not later than December 31, 1992, the Administrator shall promulgate emission limitations for coke oven emissions from coke oven batteries. Notwithstanding paragraph (3) of this subsection, the compliance date for such emission limitations for existing coke oven batteries shall be January 1, 1998. Such emission limitations shall reflect the lowest achievable emission rate as defined in section 7501 of this title for a coke oven battery that is rebuilt or a replacement at a coke oven plant for an existing battery. Such emission limitations shall be no less stringent than—

(I) 3 per centum leaking doors (5 per centum leaking doors for six meter batteries);

(II) 1 per centum leaking lids;

(III) 4 per centum leaking offtakes; and

(IV) 16 seconds visible emissions per charge,

with an exclusion for emissions during the period after the closing of self-sealing oven doors (or the total mass emissions equivalent). The rulemaking in which such emission limitations are promulgated shall also establish an appropriate measurement methodology for determining compliance with such emission limitations, and shall establish such emission limitations in terms of an equivalent level of mass emissions reduction from a coke oven battery, unless the Administrator finds that such a mass emissions standard would not be practicable or enforceable. Such measurement methodology, to the extent it measures leaking doors, shall take into consideration alternative test methods that reflect the best technology and practices actually applied in the affected industries, and shall assure that the final test methods are consistent with the performance of such best technology and practices.

(ii) If the Administrator fails to promulgate such emission limitations under this subparagraph prior to the effective date of such emission limitations, the emission limitations applicable to coke oven batteries under this subparagraph shall be—

(I) 3 per centum leaking doors (5 per centum leaking doors for six meter batteries);

(II) 1 per centum leaking lids;

(III) 4 per centum leaking offtakes; and

(IV) 16 seconds visible emissions per charge,

or the total mass emissions equivalent (if the total mass emissions equivalent is determined to be practicable and enforceable), with no exclusion for emissions during the period after the closing of self-sealing oven doors.

(C) Not later than January 1, 2007, the Administrator shall review the emission limitations promulgated under subparagraph (B) and revise, as necessary, such emission limitations to reflect the lowest achievable emission rate as defined in section 7501 of this title at the time for a coke oven battery that is rebuilt or a replacement at a coke oven plant for an existing battery. Such emission limitations shall be no less stringent than the emission limitation promulgated under subparagraph (B). Notwithstanding paragraph (2) of this subsection, the compliance date for such emission limitations for existing coke oven batteries shall be January 1, 2010.

(D) At any time prior to January 1, 1998, the owner or operator of any coke oven battery may elect to comply with emission limitations promulgated under subsection (f) of this section by the date such emission limitations would otherwise apply to such coke oven battery, in lieu of the emission limitations and the compliance dates provided under subparagraphs (B) and (C) of this paragraph. Any such owner or operator shall be legally bound to comply with such emission limitations promulgated under subsection (f) of this section with respect to such coke oven battery as of January 1, 2003. If no such emission limitations have been promulgated for such coke oven battery, the Administrator shall promulgate such emission limitations in accordance with subsection (f) of this section for such coke oven battery.

(E) Coke oven batteries qualifying for an extension under subparagraph (A) shall make available not later than January 1, 2000, to the surrounding communities the results of any risk assessment performed by the Administrator to determine the appropriate level of any emission standard established by the Administrator pursuant to subsection (f) of this section.

(F) Notwithstanding the provisions of this section, reconstruction of any source of coke oven emissions qualifying for an extension under this paragraph shall not subject such source to emission limitations under subsection (f) of this section more stringent than those established under subparagraphs (B) and (C) until January 1, 2020. For the purposes of this subparagraph, the term "reconstruction" includes the replacement of existing coke oven battery capacity with new coke oven batteries of comparable or lower capacity and lower potential emissions.

(j) Equivalent emission limitation by permit

(1) Effective date

The requirements of this subsection shall apply in each State beginning on the effective date of a permit program established pursuant to subchapter V of this chapter in such State, but not prior to the date 42 months after November 15, 1990.

(2) Failure to promulgate a standard

In the event that the Administrator fails to promulgate a standard for a category or subcategory of major sources by the date established pursuant to subsection (e)(1) and (3) of this section, and begin-

ning 18 months after such date (but not prior to the effective date of a permit program under subchapter V of this chapter), the owner or operator of any major source in such category or subcategory shall submit a permit application under paragraph (3) and such owner or operator shall also comply with paragraphs (5) and (6).

(3) Applications

By the date established by paragraph (2), the owner or operator of a major source subject to this subsection shall file an application for a permit. If the owner or operator of a source has submitted a timely and complete application for a permit required by this subsection, any failure to have a permit shall not be a violation of paragraph (2), unless the delay in final action is due to the failure of the applicant to timely submit information required or requested to process the application. The Administrator shall not later than 18 months after November 15, 1990, and after notice and opportunity for comment, establish requirements for applications under this subsection including a standard application form and criteria for determining in a timely manner the completeness of applications.

(4) Review and approval

Permit applications submitted under this subsection shall be reviewed and approved or disapproved according to the provisions of section 7661d of this title. In the event that the Administrator (or the State) disapproves a permit application submitted under this subsection or determines that the application is incomplete, the applicant shall have up to 6 months to revise the application to meet the objections of the Administrator (or the State).

(5) Emission limitation

The permit shall be issued pursuant to subchapter V of this chapter and shall contain emission limitations for the hazardous air pollutants subject to regulation under this section and emitted by the source that the Administrator (or the State) determines, on a case-by-case basis, to be equivalent to the limitation that would apply to such source if an emission standard had been promulgated in a timely manner under subsection (d) of this section. In the alternative, if the applicable criteria are met, the permit may contain an emissions limitation established according to the provisions of subsection (i)(5) of this section. For purposes of the preceding sentence, the reduction required by subsection (i)(5)(A) of this section shall be achieved by the date on which the relevant standard should have been promulgated under subsection (d) of this section. No such pollutant may be emitted in amounts exceeding an emission limitation contained in a permit immediately for new sources and, as expeditiously as practicable, but not later than the date 3 years after the permit is issued for existing sources or such other compliance date as would apply under subsection (i) of this section.

(6) Applicability of subsequent standards

If the Administrator promulgates an emission standard that is applicable to the major source prior to the date on which a permit application is approved, the emission limitation in the permit shall reflect the promulgated standard rather than the emission limitation determined pursuant to paragraph (5), provided that the source shall have the compliance period provided under subsection (i) of this section. If the Administrator promulgates a standard under subsection (d) of this section that would be applicable to the source in lieu of the emission limitation established by permit under this subsection after the date on which the permit has been issued, the Administrator (or the State) shall revise such permit upon the next renewal to reflect the standard promulgated by the Administrator providing such source a reasonable time to comply, but no longer than 8 years after such standard is promulgated or 8 years after the date on which the source is first required to comply with the emissions limitation established by paragraph (5), whichever is earlier.

(k) Area source program

(1) Findings and purpose

The Congress finds that emissions of hazardous air pollutants from area sources may individually, or in the aggregate, present significant risks to public health in urban areas. Considering the large number of persons exposed and the risks of carcinogenic and other adverse health effects from hazardous air pollutants, ambient concentrations characteristic of large urban areas should be reduced to levels substantially below those currently experienced. It is the purpose of this subsection to achieve a substantial reduction in emissions of hazardous air pollutants from area sources and an equivalent reduction in the public health risks associated with such sources including a reduction of not less than 75 per centum in the incidence of cancer attributable to emissions from such sources.

(2) Research program

The Administrator shall, after consultation with State and local air pollution control officials, conduct a program of research with respect to sources of hazardous air pollutants in urban areas and shall include within such program—

(A) ambient monitoring for a broad range of hazardous air pollutants (including, but not limited to, volatile organic compounds, metals, pesti-

cides and products of incomplete combustion) in a representative number of urban locations;

(B) analysis to characterize the sources of such pollution with a focus on area sources and the contribution that such sources make to public health risks from hazardous air pollutants; and

(C) consideration of atmospheric transformation and other factors which can elevate public health risks from such pollutants.

Health effects considered under this program shall include, but not be limited to, carcinogenicity, mutagenicity, teratogenicity, neurotoxicity, reproductive dysfunction and other acute and chronic effects including the role of such pollutants as precursors of ozone or acid aerosol formation. The Administrator shall report the preliminary results of such research not later than 3 years after November 15, 1990.

(3) National strategy

(A) Considering information collected pursuant to the monitoring program authorized by paragraph (2), the Administrator shall, not later than 5 years after November 15, 1990, and after notice and opportunity for public comment, prepare and transmit to the Congress a comprehensive strategy to control emissions of hazardous air pollutants from area sources in urban areas.

(B) The strategy shall—

(i) identify not less than 30 hazardous air pollutants which, as the result of emissions from area sources, present the greatest threat to public health in the largest number of urban areas and that are or will be listed pursuant to subsection (b) of this section, and

(ii) identify the source categories or subcategories emitting such pollutants that are or will be listed pursuant to subsection (c) of this section. When identifying categories and subcategories of sources under this subparagraph, the Administrator shall assure that sources accounting for 90 per centum or more of the aggregate emissions of each of the 30 identified hazardous air pollutants are subject to standards pursuant to subsection (d) of this section.

(C) The strategy shall include a schedule of specific actions to substantially reduce the public health risks posed by the release of hazardous air pollutants from area sources that will be implemented by the Administrator under the authority of this or other laws (including, but not limited to, the Toxic Substances Control Act [15 U.S.C.A. § 2601 et seq.], the Federal Insecticide, Fungicide and Rodenticide Act [7 U.S.C.A. § 136 et seq.] and the Resource Conservation and Recovery Act [42 U.S.C.A. § 6901 et seq.]) or by the States. The strategy shall achieve a reduction in the incidence of cancer attributable to exposure to hazardous air pollutants emitted by stationary sources of not less than 75 per centum, considering control of emissions of hazardous air pollutants from all stationary sources and resulting from measures implemented by the Administrator or by the States under this or other laws.

(D) The strategy may also identify research needs in monitoring, analytical methodology, modeling or pollution control techniques and recommendations for changes in law that would further the goals and objectives of this subsection.

(E) Nothing in this subsection shall be interpreted to preclude or delay implementation of actions with respect to area sources of hazardous air pollutants under consideration pursuant to this or any other law and that may be promulgated before the strategy is prepared.

(F) The Administrator shall implement the strategy as expeditiously as practicable assuring that all sources are in compliance with all requirements not later than 9 years after November 15, 1990.

(G) As part of such strategy the Administrator shall provide for ambient monitoring and emissions modeling in urban areas as appropriate to demonstrate that the goals and objectives of the strategy are being met.

(4) Areawide activities

In addition to the national urban air toxics strategy authorized by paragraph (3), the Administrator shall also encourage and support areawide strategies developed by State or local air pollution control agencies that are intended to reduce risks from emissions by area sources within a particular urban area. From the funds available for grants under this section, the Administrator shall set aside not less than 10 per centum to support areawide strategies addressing hazardous air pollutants emitted by area sources and shall award such funds on a demonstration basis to those States with innovative and effective strategies. At the request of State or local air pollution control officials, the Administrator shall prepare guidelines for control technologies or management practices which may be applicable to various categories or subcategories of area sources.

(5) Report

The Administrator shall report to the Congress at intervals not later than 8 and 12 years after November 15, 1990, on actions taken under this subsection and other parts of this chapter to reduce the risk to public health posed by the release of hazardous air pollutants from area sources. The reports shall also identify specific metropolitan areas that continue to experience high risks to public health as the result of emissions from area sources.

(*l*) State programs

(1) In general

Each State may develop and submit to the Administrator for approval a program for the implementation and enforcement (including a review of enforcement delegations previously granted) of emission standards and other requirements for air pollutants subject to this section or requirements for the prevention and mitigation of accidental releases pursuant to subsection (r) of this section. A program submitted by a State under this subsection may provide for partial or complete delegation of the Administrator's authorities and responsibilities to implement and enforce emissions standards and prevention requirements but shall not include authority to set standards less stringent than those promulgated by the Administrator under this chapter.

(2) Guidance

Not later than 12 months after November 15, 1990, the Administrator shall publish guidance that would be useful to the States in developing programs for submittal under this subsection. The guidance shall also provide for the registration of all facilities producing, processing, handling or storing any substance listed pursuant to subsection (r) of this section in amounts greater than the threshold quantity. The Administrator shall include as an element in such guidance an optional program begun in 1986 for the review of high-risk point sources of air pollutants including, but not limited to, hazardous air pollutants listed pursuant to subsection (b) of this section.

(3) Technical assistance

The Administrator shall establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies and, on a cost recovery basis, to others on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring. The Administrator shall use the authority of section 7403 of this title to examine methods for preventing, measuring, and controlling emissions and evaluating associated health and ecological risks. Where appropriate, such activity shall be conducted with not-for-profit organizations. The Administrator may conduct research on methods for preventing, measuring and controlling emissions and evaluating associated health and environment risks. All information collected under this paragraph shall be available to the public.

(4) Grants

Upon application of a State, the Administrator may make grants, subject to such terms and conditions as the Administrator deems appropriate, to such State for the purpose of assisting the State in developing and implementing a program for submittal and approval under this subsection. Programs assisted under this paragraph may include program elements addressing air pollutants or extremely hazardous substances other than those specifically subject to this section. Grants under this paragraph may include support for high-risk point source review as provided in paragraph (2) and support for the development and implementation of areawide area source programs pursuant to subsection (k) of this section.

(5) Approval or disapproval

Not later than 180 days after receiving a program submitted by a State, and after notice and opportunity for public comment, the Administrator shall either approve or disapprove such program. The Administrator shall disapprove any program submitted by a State, if the Administrator determines that—

(A) the authorities contained in the program are not adequate to assure compliance by all sources within the State with each applicable standard, regulation or requirement established by the Administrator under this section;

(B) adequate authority does not exist, or adequate resources are not available, to implement the program;

(C) the schedule for implementing the program and assuring compliance by affected sources is not sufficiently expeditious; or

(D) the program is otherwise not in compliance with the guidance issued by the Administrator under paragraph (2) or is not likely to satisfy, in whole or in part, the objectives of this chapter.

If the Administrator disapproves a State program, the Administrator shall notify the State of any revisions or modifications necessary to obtain approval. The State may revise and resubmit the proposed program for review and approval pursuant to the provisions of this subsection.

(6) Withdrawal

Whenever the Administrator determines, after public hearing, that a State is not administering and enforcing a program approved pursuant to this subsection in accordance with the guidance published pursuant to paragraph (2) or the requirements of paragraph (5), the Administrator shall so notify the State and, if action which will assure prompt compliance is not taken within 90 days, the Administrator shall withdraw approval of the program. The Administrator shall not withdraw approval of any pro-

gram unless the State shall have been notified and the reasons for withdrawal shall have been stated in writing and made public.

(7) Authority to enforce

Nothing in this subsection shall prohibit the Administrator from enforcing any applicable emission standard or requirement under this section.

(8) Local program

The Administrator may, after notice and opportunity for public comment, approve a program developed and submitted by a local air pollution control agency (after consultation with the State) pursuant to this subsection and any such agency implementing an approved program may take any action authorized to be taken by a State under this section.

(9) Permit authority

Nothing in this subsection shall affect the authorities and obligations of the Administrator or the State under subchapter V of this chapter.

(m) Atmospheric deposition to Great Lakes and coastal waters

(1) Deposition assessment

The Administrator, in cooperation with the Under Secretary of Commerce for Oceans and Atmosphere, shall conduct a program to identify and assess the extent of atmospheric deposition of hazardous air pollutants (and in the discretion of the Administrator, other air pollutants) to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters. As part of such program, the Administrator shall—

(A) monitor the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters, including monitoring of the Great Lakes through the monitoring network established pursuant to paragraph (2) of this subsection and designing and deploying an atmospheric monitoring network for coastal waters pursuant to paragraph (4);

(B) investigate the sources and deposition rates of atmospheric deposition of air pollutants (and their atmospheric transformation precursors);

(C) conduct research to develop and improve monitoring methods and to determine the relative contribution of atmospheric pollutants to total pollution loadings to the Great Lakes, the Chesapeake Bay, Lake Champlain, and coastal waters;

(D) evaluate any adverse effects to public health or the environment caused by such deposition (including effects resulting from indirect exposure pathways) and assess the contribution of such deposition to violations of water quality standards established pursuant to the Federal Water Pollution Control Act [33 U.S.C.A. § 1251 et seq.] and drinking water standards established pursuant to the Safe Drinking Water Act [42 U.S.C.A. § 300f et seq.]; and

(E) sample for such pollutants in biota, fish, and wildlife of the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters and characterize the sources of such pollutants.

(2) Great Lakes monitoring network

The Administrator shall oversee, in accordance with Annex 15 of the Great Lakes Water Quality Agreement, the establishment and operation of a Great Lakes atmospheric deposition network to monitor atmospheric deposition of hazardous air pollutants (and in the Administrator's discretion, other air pollutants) to the Great Lakes.

(A) As part of the network provided for in this paragraph, and not later than December 31, 1991, the Administrator shall establish in each of the 5 Great Lakes at least 1 facility capable of monitoring the atmospheric deposition of hazardous air pollutants in both dry and wet conditions.

(B) The Administrator shall use the data provided by the network to identify and track the movement of hazardous air pollutants through the Great Lakes, to determine the portion of water pollution loadings attributable to atmospheric deposition of such pollutants, and to support development of remedial action plans and other management plans as required by the Great Lakes Water Quality Agreement.

(C) The Administrator shall assure that the data collected by the Great Lakes atmospheric deposition monitoring network is in a format compatible with databases sponsored by the International Joint Commission, Canada, and the several States of the Great Lakes region.

(3) Monitoring for the Chesapeake Bay and Lake Champlain

The Administrator shall establish at the Chesapeake Bay and Lake Champlain atmospheric deposition stations to monitor deposition of hazardous air pollutants (and in the Administrator's discretion, other air pollutants) within the Chesapeake Bay and Lake Champlain watersheds. The Administrator shall determine the role of air deposition in the pollutant loadings of the Chesapeake Bay and Lake Champlain, investigate the sources of air pollutants deposited in the watersheds, evaluate the health and environmental effects of such pollutant loadings, and shall sample such pollutants in biota, fish and wildlife within the watersheds, as necessary to characterize such effects.

(4) Monitoring for coastal waters

The Administrator shall design and deploy atmospheric deposition monitoring networks for coastal

waters and their watersheds and shall make any information collected through such networks available to the public. As part of this effort, the Administrator shall conduct research to develop and improve deposition monitoring methods, and to determine the relative contribution of atmospheric pollutants to pollutant loadings. For purposes of this subsection, "coastal waters" shall mean estuaries selected pursuant to section 320(a)(2)(A) of the Federal Water Pollution Control Act [33 U.S.C.A. § 1330(a)(2)(A)] or listed pursuant to section 320(a)(2)(B) of such Act [33 U.S.C.A. § 1330(a)(2)(B)] or estuarine research reserves designated pursuant to section 1461 of Title 16.

(5) Report

Within 3 years of November 15, 1990, and biennially thereafter, the Administrator, in cooperation with the Under Secretary of Commerce for Oceans and Atmosphere, shall submit to the Congress a report on the results of any monitoring, studies, and investigations conducted pursuant to this subsection. Such report shall include, at a minimum, an assessment of—

(A) the contribution of atmospheric deposition to pollution loadings in the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters;

(B) the environmental and public health effects of any pollution which is attributable to atmospheric deposition to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters;

(C) the source or sources of any pollution to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters which is attributable to atmospheric deposition;

(D) whether pollution loadings in the Great Lakes, the Chesapeake Bay, Lake Champlain or coastal waters cause or contribute to exceedances [2] of drinking water standards pursuant to the Safe Drinking Water Act [42 U.S.C.A. § 300f et seq.] or water quality standards pursuant to the Federal Water Pollution Control Act [33 U.S.C.A. § 1251 et seq.] or, with respect to the Great Lakes, exceedances [2] of the specific objectives of the Great Lakes Water Quality Agreement; and

(E) a description of any revisions of the requirements, standards, and limitations pursuant to this chapter and other applicable Federal laws as are necessary to assure protection of human health and the environment.

(6) Additional regulation

As part of the report to Congress, the Administrator shall determine whether the other provisions of this section are adequate to prevent serious adverse effects to public health and serious or widespread environmental effects, including such effects resulting from indirect exposure pathways, associated with atmospheric deposition to the Great Lakes, the Chesapeake Bay, Lake Champlain and coastal waters of hazardous air pollutants (and their atmospheric transformation products). The Administrator shall take into consideration the tendency of such pollutants to bioaccumulate. Within 5 years after November 15, 1990, the Administrator shall, based on such report and determination, promulgate, in accordance with this section, such further emission standards or control measures as may be necessary and appropriate to prevent such effects, including effects due to bioaccumulation and indirect exposure pathways. Any requirements promulgated pursuant to this paragraph with respect to coastal waters shall only apply to the coastal waters of the States which are subject to section 7627(a) of this title.

(n) Other provisions

(1) Electric utility steam generating units

(A) The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) of this section after imposition of the requirements of this chapter. The Administrator shall report the results of this study to the Congress within 3 years after November 15, 1990. The Administrator shall develop and describe in the Administrator's report to Congress alternative control strategies for emissions which may warrant regulation under this section. The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph.

(B) The Administrator shall conduct, and transmit to the Congress not later than 4 years after November 15, 1990, a study of mercury emissions from electric utility steam generating units, municipal waste combustion units, and other sources, including area sources. Such study shall consider the rate and mass of such emissions, the health and environmental effects of such emissions, technologies which are available to control such emissions, and the costs of such technologies.

(C) The National Institute of Environmental Health Sciences shall conduct, and transmit to the Congress not later than 3 years after November 15, 1990, a study to determine the threshold level of mercury exposure below which adverse human health effects are not expected to occur. Such study shall include a threshold for mercury concentrations in the tissue of fish which may be consumed

(including consumption by sensitive populations) without adverse effects to public health.

(2) Coke oven production technology study

(A) The Secretary of the Department of Energy and the Administrator shall jointly undertake a 6-year study to assess coke oven production emission control technologies and to assist in the development and commercialization of technically practicable and economically viable control technologies which have the potential to significantly reduce emissions of hazardous air pollutants from coke oven production facilities. In identifying control technologies, the Secretary and the Administrator shall consider the range of existing coke oven operations and battery design and the availability of sources of materials for such coke ovens as well as alternatives to existing coke oven production design.

(B) The Secretary and the Administrator are authorized to enter into agreements with persons who propose to develop, install and operate coke production emission control technologies which have the potential for significant emissions reductions of hazardous air pollutants provided that Federal funds shall not exceed 50 per centum of the cost of any project assisted pursuant to this paragraph.

(C) On completion of the study, the Secretary shall submit to Congress a report on the results of the study and shall make recommendations to the Administrator identifying practicable and economically viable control technologies for coke oven production facilities to reduce residual risks remaining after implementation of the standard under subsection (d) of this section.

(D) There are authorized to be appropriated $5,000,000 for each of the fiscal years 1992 through 1997 to carry out the program authorized by this paragraph.

(3) Publicly owned treatment works

The Administrator may conduct, in cooperation with the owners and operators of publicly owned treatment works, studies to characterize emissions of hazardous air pollutants emitted by such facilities, to identify industrial, commercial and residential discharges that contribute to such emissions and to demonstrate control measures for such emissions. When promulgating any standard under this section applicable to publicly owned treatment works, the Administrator may provide for control measures that include pretreatment of discharges causing emissions of hazardous air pollutants and process or product substitutions or limitations that may be effective in reducing such emissions. The Administrator may prescribe uniform sampling, modeling and risk assessment methods for use in implementing this subsection.

(4) Oil and gas wells; pipeline facilities

(A) Notwithstanding the provisions of subsection (a) of this section, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

(B) The Administrator shall not list oil and gas production wells (with its associated equipment) as an area source category under subsection (c) of this section, except that the Administrator may establish an area source category for oil and gas production wells located in any metropolitan statistical area or consolidated metropolitan statistical area with a population in excess of 1 million, if the Administrator determines that emissions of hazardous air pollutants from such wells present more than a negligible risk of adverse effects to public health.

(5) Hydrogen sulfide

The Administrator is directed to assess the hazards to public health and the environment resulting from the emission of hydrogen sulfide associated with the extraction of oil and natural gas resources. To the extent practicable, the assessment shall build upon and not duplicate work conducted for an assessment pursuant to section 8002(m) of the Solid Waste Disposal Act [42 U.S.C.A. § 6982(m)] and shall reflect consultation with the States. The assessment shall include a review of existing State and industry control standards, techniques and enforcement. The Administrator shall report to the Congress within 24 months after November 15, 1990, with the findings of such assessment, together with any recommendations, and shall, as appropriate, develop and implement a control strategy for emissions of hydrogen sulfide to protect human health and the environment, based on the findings of such assessment, using authorities under this chapter including sections[3] 7411 of this title and this section.

(6) Hydrofluoric acid

Not later than 2 years after November 15, 1990, the Administrator shall, for those regions of the country which do not have comprehensive health and safety regulations with respect to hydrofluoric acid, complete a study of the potential hazards of hydrofluoric acid and the uses of hydrofluoric acid in industrial and commercial applications to public health and the environment considering a range of

events including worst-case accidental releases and shall make recommendations to the Congress for the reduction of such hazards, if appropriate.

(7) RCRA facilities

In the case of any category or subcategory of sources the air emissions of which are regulated under subtitle C of the Solid Waste Disposal Act [42 U.S.C.A. § 6921 et seq.], the Administrator shall take into account any regulations of such emissions which are promulgated under such subtitle and shall, to the maximum extent practicable and consistent with the provisions of this section, ensure that the requirements of such subtitle and this section are consistent.

(o) National Academy of Sciences study

(1) Request of the Academy

Within 3 months of November 15, 1990, the Administrator shall enter into appropriate arrangements with the National Academy of Sciences to conduct a review of—

(A) risk assessment methodology used by the Environmental Protection Agency to determine the carcinogenic risk associated with exposure to hazardous air pollutants from source categories and subcategories subject to the requirements of this section; and

(B) improvements in such methodology.

(2) Elements to be studied

In conducting such review, the National Academy of Sciences should consider, but not be limited to, the following—

(A) the techniques used for estimating and describing the carcinogenic potency to humans of hazardous air pollutants; and

(B) the techniques used for estimating exposure to hazardous air pollutants (for hypothetical and actual maximally exposed individuals as well as other exposed individuals).

(3) Other health effects of concern

To the extent practicable, the Academy shall evaluate and report on the methodology for assessing the risk of adverse human health effects other than cancer for which safe thresholds of exposure may not exist, including, but not limited to, inheritable genetic mutations, birth defects, and reproductive dysfunctions.

(4) Report

A report on the results of such review shall be submitted to the Senate Committee on Environment and Public Works, the House Committee on Energy and Commerce, the Risk Assessment and Management Commission established by section 303 of the Clean Air Act Amendments of 1990 and the Administrator not later than 30 months after November 15, 1990.

(5) Assistance

The Administrator shall assist the Academy in gathering any information the Academy deems necessary to carry out this subsection. The Administrator may use any authority under this chapter to obtain information from any person, and to require any person to conduct tests, keep and produce records, and make reports respecting research or other activities conducted by such person as necessary to carry out this subsection.

(6) Authorization

Of the funds authorized to be appropriated to the Administrator by this chapter, such amounts as are required shall be available to carry out this subsection.

(7) Guidelines for carcinogenic risk assessment

The Administrator shall consider, but need not adopt, the recommendations contained in the report of the National Academy of Sciences prepared pursuant to this subsection and the views of the Science Advisory Board, with respect to such report. Prior to the promulgation of any standard under subsection (f) of this section, and after notice and opportunity for comment, the Administrator shall publish revised Guidelines for Carcinogenic Risk Assessment or a detailed explanation of the reasons that any recommendations contained in the report of the National Academy of Sciences will not be implemented. The publication of such revised Guidelines shall be a final Agency action for purposes of section 7607 of this title.

(p) Mickey Leland National Urban Air Toxics Research Center

(1) Establishment

The Administrator shall oversee the establishment of a National Urban Air Toxics Research Center, to be located at a university, a hospital, or other facility capable of undertaking and maintaining similar research capabilities in the areas of epidemiology, oncology, toxicology, pulmonary medicine, pathology, and biostatistics. The center shall be known as the Mickey Leland National Urban Air Toxics Research Center. The geographic site of the National Urban Air Toxics Research Center should be further directed to Harris County, Texas, in order to take full advantage of the well developed scientific community presence on-site at the Texas Medical Center as well as the extensive data previously compiled for the comprehensive monitoring system currently in place.

(2) Board of Directors

The National Urban Air Toxics Research Center shall be governed by a Board of Directors to be comprised of 9 members, the appointment of which shall be allocated pro rata among the Speaker of the House, the Majority Leader of the Senate and the President. The members of the Board of Directors shall be selected based on their respective academic and professional backgrounds and expertise in matters relating to public health, environmental pollution and industrial hygiene. The duties of the Board of Directors shall be to determine policy and research guidelines, submit views from center sponsors and the public and issue periodic reports of center findings and activities.

(3) Scientific Advisory Panel

The Board of Directors shall be advised by a Scientific Advisory Panel, the 13 members of which shall be appointed by the Board, and to include eminent members of the scientific and medical communities. The Panel membership may include scientists with relevant experience from the National Institute of Environmental Health Sciences, the Center for Disease Control, the Environmental Protection Agency, the National Cancer Institute, and others, and the Panel shall conduct peer review and evaluate research results. The Panel shall assist the Board in developing the research agenda, reviewing proposals and applications, and advise on the awarding of research grants.

(4) Funding

The center shall be established and funded with both Federal and private source funds.

(q) Savings provision

(1) Standards previously promulgated

Any standard under this section in effect before the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990] shall remain in force and effect after such date unless modified as provided in this section before the date of enactment of such Amendments or under such Amendments. Except as provided in paragraph (4), any standard under this section which has been promulgated, but has not taken effect, before such date shall not be affected by such Amendments unless modified as provided in this section before such date or under such Amendments. Each such standard shall be reviewed and, if appropriate, revised, to comply with the requirements of subsection (d) of this section within 10 years after the date of enactment of the Clean Air Act Amendments of 1990. If a timely petition for review of any such standard under section 7607 of this title is pending on such date of enactment, the standard shall be upheld if it complies with this section as in effect before that date. If any such standard is remanded to the Administrator, the Administrator may in the Administrator's discretion apply either the requirements of this section, or those of this section as in effect before the date of enactment of the Clean Air Act Amendments of 1990.

(2) Special rule

Notwithstanding paragraph (1), no standard shall be established under this section, as amended by the Clean Air Act Amendments of 1990, for radionuclide emissions from (A) elemental phosphorous plants, (B) grate calcination elemental phosphorous plants, (C) phosphogypsum stacks, or (D) any subcategory of the foregoing. This section, as in effect prior to the date of enactment of the Clean Air Act Amendments of 1990 [November 15, 1990], shall remain in effect for radionuclide emissions from such plants and stacks.

(3) Other categories

Notwithstanding paragraph (1), this section, as in effect prior to the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990], shall remain in effect for radionuclide emissions from non-Department of Energy Federal facilities that are not licensed by the Nuclear Regulatory Commission, coal-fired utility and industrial boilers, underground uranium mines, surface uranium mines, and disposal of uranium mill tailings piles, unless the Administrator, in the Administrator's discretion, applies the requirements of this section as modified by the Clean Air Act Amendments of 1990 to such sources of radionuclides.

(4) Medical facilities

Notwithstanding paragraph (1), no standard promulgated under this section prior to November 15, 1990, with respect to medical research or treatment facilities shall take effect for two years following November 15, 1990, unless the Administrator makes a determination pursuant to a rulemaking under subsection (d)(9) of this section. If the Administrator determines that the regulatory program established by the Nuclear Regulatory Commission for such facilities does not provide an ample margin of safety to protect public health, the requirements of this section shall fully apply to such facilities. If the Administrator determines that such regulatory program does provide an ample margin of safety to protect the public health, the Administrator is not required to promulgate a standard under this section for such facilities, as provided in subsection (d)(9) of this section.

(r) Prevention of accidental releases

(1) Purpose and general duty

It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance. The owners and operators of stationary sources producing, processing, handling or storing such substances have a general duty in the same manner and to the same extent as section 654 of Title 29 to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur. For purposes of this paragraph, the provisions of section 7604 of this title shall not be available to any person or otherwise be construed to be applicable to this paragraph. Nothing in this section shall be interpreted, construed, implied or applied to create any liability or basis for suit for compensation for bodily injury or any other injury or property damages to any person which may result from accidental releases of such substances.

(2) Definitions

(A) The term "accidental release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

(B) The term "regulated substance" means a substance listed under paragraph (3).

(C) The term "stationary source" means any buildings, structures, equipment, installations or substance emitting stationary activities (i) which belong to the same industrial group, (ii) which are located on one or more contiguous properties, (iii) which are under the control of the same person (or persons under common control), and (iv) from which an accidental release may occur.

(D) The term "retail facility" means a stationary source at which more than one-half of the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

(3) List of substances

The Administrator shall promulgate not later than 24 months after November 15, 1990, an initial list of 100 substances which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. For purposes of promulgating such list, the Administrator shall use, but is not limited to, the list of extremely hazardous substances published under the Emergency Planning and Community Right-to-Know Act of 1986 [42 U.S.C.A. § 11001 et seq.], with such modifications as the Administrator deems appropriate. The initial list shall include chlorine, anhydrous ammonia, methyl chloride, ethylene oxide, vinyl chloride, methyl isocyanate, hydrogen cyanide, ammonia, hydrogen sulfide, toluene diisocyanate, phosgene, bromine, anhydrous hydrogen chloride, hydrogen fluoride, anhydrous sulfur dioxide, and sulfur trioxide. The initial list shall include at least 100 substances which pose the greatest risk of causing death, injury, or serious adverse effects to human health or the environment from accidental releases. Regulations establishing the list shall include an explanation of the basis for establishing the list. The list may be revised from time to time by the Administrator on the Administrator's own motion or by petition and shall be reviewed at least every 5 years. No air pollutant for which a national primary ambient air quality standard has been established shall be included on any such list. No substance, practice, process, or activity regulated under subchapter VI of this chapter shall be subject to regulations under this subsection. The Administrator shall establish procedures for the addition and deletion of substances from the list established under this paragraph consistent with those applicable to the list in subsection (b) of this section.

(4) Factors to be considered

In listing substances under paragraph (3), the Administrator—

(A) shall consider—

(i) the severity of any acute adverse health effects associated with accidental releases of the substance;

(ii) the likelihood of accidental releases of the substance; and

(iii) the potential magnitude of human exposure to accidental releases of the substance; and

(B) shall not list a flammable substance when used as a fuel or held for sale as a fuel at a retail facility under this subsection solely because of the explosive or flammable properties of the substance, unless a fire or explosion caused by the substance will result in acute adverse health effects from human exposure to the substance, including the unburned fuel or its combustion byproducts, other than those caused by the heat of the fire or impact of the explosion.

(5) Threshold quantity

At the time any substance is listed pursuant to paragraph (3), the Administrator shall establish by rule, a threshold quantity for the substance, taking

into account the toxicity, reactivity, volatility, dispersibility, combustibility, or flammability of the substance and the amount of the substance which, as a result of an accidental release, is known to cause or may reasonably be anticipated to cause death, injury or serious adverse effects to human health for which the substance was listed. The Administrator is authorized to establish a greater threshold quantity for, or to exempt entirely, any substance that is a nutrient used in agriculture when held by a farmer.

(6) Chemical Safety Board

(A) There is hereby established an independent safety board to be known as the Chemical Safety and Hazard Investigation Board.

(B) The Board shall consist of 5 members, including a Chairperson, who shall be appointed by the President, by and with the advice and consent of the Senate. Members of the Board shall be appointed on the basis of technical qualification, professional standing, and demonstrated knowledge in the fields of accident reconstruction, safety engineering, human factors, toxicology, or air pollution regulation. The terms of office of members of the Board shall be 5 years. Any member of the Board, including the Chairperson, may be removed for inefficiency, neglect of duty, or malfeasance in office. The Chairperson shall be the Chief Executive Officer of the Board and shall exercise the executive and administrative functions of the Board.

(C) The Board shall—

(i) investigate (or cause to be investigated), determine and report to the public in writing the facts, conditions, and circumstances and the cause or probable cause of any accidental release resulting in a fatality, serious injury or substantial property damages;

(ii) issue periodic reports to the Congress, Federal, State and local agencies, including the Environmental Protection Agency and the Occupational Safety and Health Administration, concerned with the safety of chemical production, processing, handling and storage, and other interested persons recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible and may include in such reports proposed rules or orders which should be issued by the Administrator under the authority of this section or the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C.A. § 651 et seq.] to prevent or minimize the consequences of any release of substances that may cause death, injury or other serious adverse effects on human health or substantial property damage as the result of an accidental release; and

(iii) establish by regulation requirements binding on persons for reporting accidental releases into the ambient air subject to the Board's investigatory jurisdiction. Reporting releases to the National Response Center, in lieu of the Board directly, shall satisfy such regulations. The National Response Center shall promptly notify the Board of any releases which are within the Board's jurisdiction.

(D) The Board may utilize the expertise and experience of other agencies.

(E) The Board shall coordinate its activities with investigations and studies conducted by other agencies of the United States having a responsibility to protect public health and safety. The Board shall enter into a memorandum of understanding with the National Transportation Safety Board to assure coordination of functions and to limit duplication of activities which shall designate the National Transportation Safety Board as the lead agency for the investigation of releases which are transportation related. The Board shall not be authorized to investigate marine oil spills, which the National Transportation Safety Board is authorized to investigate. The Board shall enter into a memorandum of understanding with the Occupational Safety and Health Administration so as to limit duplication of activities. In no event shall the Board forego an investigation where an accidental release causes a fatality or serious injury among the general public, or had the potential to cause substantial property damage or a number of deaths or injuries among the general public.

(F) The Board is authorized to conduct research and studies with respect to the potential for accidental releases, whether or not an accidental release has occurred, where there is evidence which indicates the presence of a potential hazard or hazards. To the extent practicable, the Board shall conduct such studies in cooperation with other Federal agencies having emergency response authorities, State and local governmental agencies and associations and organizations from the industrial, commercial, and nonprofit sectors.

(G) No part of the conclusions, findings, or recommendations of the Board relating to any accidental release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.

(H) Not later than 18 months after November 15, 1990, the Board shall publish a report accompanied by recommendations to the Administrator on the

use of hazard assessments in preventing the occurrence and minimizing the consequences of accidental releases of extremely hazardous substances. The recommendations shall include a list of extremely hazardous substances which are not regulated substances (including threshold quantities for such substances) and categories of stationary sources for which hazard assessments would be an appropriate measure to aid in the prevention of accidental releases and to minimize the consequences of those releases that do occur. The recommendations shall also include a description of the information and analysis which would be appropriate to include in any hazard assessment. The Board shall also make recommendations with respect to the role of risk management plans as required by paragraph (8)(B)[4] in preventing accidental releases. The Board may from time to time review and revise its recommendations under this subparagraph.

(I) Whenever the Board submits a recommendation with respect to accidental releases to the Administrator, the Administrator shall respond to such recommendation formally and in writing not later than 180 days after receipt thereof. The response to the Board's recommendation by the Administrator shall indicate whether the Administrator will—

(i) initiate a rulemaking or issue such orders as are necessary to implement the recommendation in full or in part, pursuant to any timetable contained in the recommendation;

(ii) decline to initiate a rulemaking or issue orders as recommended.

Any determination by the Administrator not to implement a recommendation of the Board or to implement a recommendation only in part, including any variation from the schedule contained in the recommendation, shall be accompanied by a statement from the Administrator setting forth the reasons for such determination.

(J) The Board may make recommendations with respect to accidental releases to the Secretary of Labor. Whenever the Board submits such recommendation, the Secretary shall respond to such recommendation formally and in writing not later than 180 days after receipt thereof. The response to the Board's recommendation by the Administrator shall indicate whether the Secretary will—

(i) initiate a rulemaking or issue such orders as are necessary to implement the recommendation in full or in part, pursuant to any timetable contained in the recommendation;

(ii) decline to initiate a rulemaking or issue orders as recommended.

Any determination by the Secretary not to implement a recommendation or to implement a recommendation only in part, including any variation from the schedule contained in the recommendation, shall be accompanied by a statement from the Secretary setting forth the reasons for such determination.

(K) Within 2 years after November 15, 1990, the Board shall issue a report to the Administrator of the Environmental Protection Agency and to the Administrator of the Occupational Safety and Health Administration recommending the adoption of regulations for the preparation of risk management plans and general requirements for the prevention of accidental releases of regulated substances into the ambient air (including recommendations for listing substances under paragraph (3)) and for the mitigation of the potential adverse effect on human health or the environment as a result of accidental releases which should be applicable to any stationary source handling any regulated substance in more than threshold amounts. The Board may include proposed rules or orders which should be issued by the Administrator under authority of this subsection or by the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C.A. § 651 et seq.]. Any such recommendations shall be specific and shall identify the regulated substance or class of regulated substances (or other substances) to which the recommendations apply. The Administrator shall consider such recommendations before promulgating regulations required by paragraph (7)(B).

(L) The Board, or upon authority of the Board, any member thereof, any administrative law judge employed by or assigned to the Board, or any officer or employee duly designated by the Board, may for the purpose of carrying out duties authorized by subparagraph (C)—

(i) hold such hearings, sit and act at such times and places, administer such oaths, and require by subpoena or otherwise attendance and testimony of such witnesses and the production of evidence and may require by order that any person engaged in the production, processing, handling, or storage of extremely hazardous substances submit written reports and responses to requests and questions within such time and in such form as the Board may require; and

(ii) upon presenting appropriate credentials and a written notice of inspection authority, enter any property where an accidental release causing a fatality, serious injury or substantial property damage has occurred and do all things therein necessary for a proper investigation pursuant to subparagraph (C) and inspect at reasonable times records, files, papers, processes, controls, and facilities and take such samples as are relevant to such investigation.

Whenever the Administrator or the Board conducts an inspection of a facility pursuant to this subsec-

tion, employees and their representatives shall have the same rights to participate in such inspections as provided in the Occupational Safety and Health Act [29 U.S.C.A. § 651 et seq.].

(M) In addition to that described in subparagraph (L), the Board may use any information gathering authority of the Administrator under this chapter, including the subpoena power provided in section 7607(a)(1) of this title.

(N) The Board is authorized to establish such procedural and administrative rules as are necessary to the exercise of its functions and duties. The Board is authorized without regard to section 5 of Title 41 to enter into contracts, leases, cooperative agreements or other transactions as may be necessary in the conduct of the duties and functions of the Board with any other agency, institution, or person.

(O) After the effective date of any reporting requirement promulgated pursuant to subparagraph (C)(iii) it shall be unlawful for any person to fail to report any release of any extremely hazardous substance as required by such subparagraph. The Administrator is authorized to enforce any regulation or requirements established by the Board pursuant to subparagraph (C)(iii) using the authorities of sections 7413 and 7414 of this title. Any request for information from the owner or operator of a stationary source made by the Board or by the Administrator under this section shall be treated, for purposes of sections 7413, 7414, 7416, 7420, 7603, 7604 and 7607 of this title and any other enforcement provisions of this chapter, as a request made by the Administrator under section 7414 of this title and may be enforced by the Chairperson of the Board or by the Administrator as provided in such section.

(P) The Administrator shall provide to the Board such support and facilities as may be necessary for operation of the Board.

(Q) Consistent with subsection (G)[5] and section 7414(c) of this title any records, reports or information obtained by the Board shall be available to the Administrator, the Secretary of Labor, the Congress and the public, except that upon a showing satisfactory to the Board by any person that records, reports, or information, or particular part thereof (other than release or emissions data) to which the Board has access, if made public, is likely to cause substantial harm to the person's competitive position, the Board shall consider such record, report, or information or particular portion thereof confidential in accordance with section 1905 of Title 18, except that such record, report, or information may be disclosed to other officers, employees, and authorized representatives of the United States concerned with carrying out this chapter or when relevant under any proceeding under this chapter. This subparagraph does not constitute authority to withhold records, reports, or information from the Congress.

(R) Whenever the Board submits or transmits any budget estimate, budget request, supplemental budget request, or other budget information, legislative recommendation, prepared testimony for congressional hearings, recommendation or study to the President, the Secretary of Labor, the Administrator, or the Director of the Office of Management and Budget, it shall concurrently transmit a copy thereof to the Congress. No report of the Board shall be subject to review by the Administrator or any Federal agency or to judicial review in any court. No officer or agency of the United States shall have authority to require the Board to submit its budget requests or estimates, legislative recommendations, prepared testimony, comments, recommendations or reports to any officer or agency of the United States for approval or review prior to the submission of such recommendations, testimony, comments or reports to the Congress. In the performance of their functions as established by this chapter, the members, officers and employees of the Board shall not be responsible to or subject to supervision or direction, in carrying out any duties under this subsection, of any officer or employee or agent of the Environmental Protection Agency, the Department of Labor or any other agency of the United States except that the President may remove any member, officer or employee of the Board for inefficiency, neglect of duty or malfeasance in office. Nothing in this section shall affect the application of Title 5 to officers or employees of the Board.

(S) The Board shall submit an annual report to the President and to the Congress which shall include, but not be limited to, information on accidental releases which have been investigated by or reported to the Board during the previous year, recommendations for legislative or administrative action which the Board has made, the actions which have been taken by the Administrator or the Secretary of Labor or the heads of other agencies to implement such recommendations, an identification of priorities for study and investigation in the succeeding year, progress in the development of risk-reduction technologies and the response to and implementation of significant research findings on chemical safety in the public and private sector.

(7) **Accident prevention**

(A) In order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection,

and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements. Regulations promulgated under this paragraph may make distinctions between various types, classes, and kinds of facilities, devices and systems taking into consideration factors including, but not limited to, the size, location, process, process controls, quantity of substances handled, potency of substances, and response capabilities present at any stationary source. Regulations promulgated pursuant to this subparagraph shall have an effective date, as determined by the Administrator, assuring compliance as expeditiously as practicable.

(B)(i) Within 3 years after November 15, 1990, the Administrator shall promulgate reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases. The Administrator shall utilize the expertise of the Secretaries of Transportation and Labor in promulgating such regulations. As appropriate, such regulations shall cover the use, operation, repair, replacement, and maintenance of equipment to monitor, detect, inspect, and control such releases, including training of persons in the use and maintenance of such equipment and in the conduct of periodic inspections. The regulations shall include procedures and measures for emergency response after an accidental release of a regulated substance in order to protect human health and the environment. The regulations shall cover storage, as well as operations. The regulations shall, as appropriate, recognize differences in size, operations, processes, class and categories of sources and the voluntary actions of such sources to prevent such releases and respond to such releases. The regulations shall be applicable to a stationary source 3 years after the date of promulgation, or 3 years after the date on which a regulated substance present at the source in more than threshold amounts is first listed under paragraph (3), whichever is later.

(ii) The regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a risk management plan to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment. Such plan shall provide for compliance with the requirements of this subsection and shall also include each of the following:

(I) a hazard assessment to assess the potential effects of an accidental release of any regulated substance. This assessment shall include an estimate of potential release quantities and a determination of downwind effects, including potential exposures to affected populations. Such assessment shall include a previous release history of the past 5 years, including the size, concentration, and duration of releases, and shall include an evaluation of worst case accidental releases;

(II) a program for preventing accidental releases of regulated substances, including safety precautions and maintenance, monitoring and employee training measures to be used at the source; and

(III) a response program providing for specific actions to be taken in response to an accidental release of a regulated substance so as to protect human health and the environment, including procedures for informing the public and local agencies responsible for responding to accidental releases, emergency health care, and employee training measures.

At the time regulations are promulgated under this subparagraph, the Administrator shall promulgate guidelines to assist stationary sources in the preparation of risk management plans. The guidelines shall, to the extent practicable, include model risk management plans.

(iii) The owner or operator of each stationary source covered by clause (ii) shall register a risk management plan prepared under this subparagraph with the Administrator before the effective date of regulations under clause (i) in such form and manner as the Administrator shall, by rule, require. Plans prepared pursuant to this subparagraph shall also be submitted to the Chemical Safety and Hazard Investigation Board, to the State in which the stationary source is located, and to any local agency or entity having responsibility for planning for or responding to accidental releases which may occur at such source, and shall be available to the public under section 7414(c) of this title. The Administrator shall establish, by rule, an auditing system to regularly review and, if necessary, require revision in risk management plans to assure that the plans comply with this subparagraph. Each such plan shall be updated periodically as required by the Administrator, by rule.

(C) Any regulations promulgated pursuant to this subsection shall to the maximum extent practicable, consistent with this subsection, be consistent with the recommendations and standards established by the American Society of Mechanical Engineers (ASME), the American National Standards

Institute (ANSI) or the American Society of Testing Materials (ASTM). The Administrator shall take into consideration the concerns of small business in promulgating regulations under this subsection.

(D) In carrying out the authority of this paragraph, the Administrator shall consult with the Secretary of Labor and the Secretary of Transportation and shall coordinate any requirements under this paragraph with any requirements established for comparable purposes by the Occupational Safety and Health Administration or the Department of Transportation. Nothing in this subsection shall be interpreted, construed or applied to impose requirements affecting, or to grant the Administrator, the Chemical Safety and Hazard Investigation Board, or any other agency any authority to regulate (including requirements for hazard assessment), the accidental release of radionuclides arising from the construction and operation of facilities licensed by the Nuclear Regulatory Commission.

(E) After the effective date of any regulation or requirement imposed under this subsection, it shall be unlawful for any person to operate any stationary source subject to such regulation or requirement in violation of such regulation or requirement. Each regulation or requirement under this subsection shall for purposes of sections 7413, 7414, 7416, 7420, 7604, and 7607 of this title and other enforcement provisions of this chapter, be treated as a standard in effect under subsection (d) of this section.

(F) Notwithstanding the provisions of subchapter V of this chapter or this section, no stationary source shall be required to apply for, or operate pursuant to, a permit issued under such subchapter solely because such source is subject to regulations or requirements under this subsection.

(G) In exercising any authority under this subsection, the Administrator shall not, for purposes of section 653(b)(1) of Title 29, be deemed to be exercising statutory authority to prescribe or enforce standards or regulations affecting occupational safety and health.

(H) Public access to off-site consequence analysis information

(i) Definitions

In this subparagraph:

(I) Covered person

The term "covered person" means—

(aa) an officer or employee of the United States;

(bb) an officer or employee of an agent or contractor of the Federal Government;

(cc) an officer or employee of a State or local government;

(dd) an officer or employee of an agent or contractor of a State or local government;

(ee) an individual affiliated with an entity that has been given, by a State or local government, responsibility for preventing, planning for, or responding to accidental releases;

(ff) an officer or employee or an agent or contractor of an entity described in item (ee); and

(gg) a qualified researcher under clause (vii).

(II) Official use

The term "official use" means an action of a Federal, State, or local government agency or an entity referred to in subclause (I)(ee) intended to carry out a function relevant to preventing, planning for, or responding to accidental releases.

(III) Off-site consequence analysis information

The term "off-site consequence analysis information" means those portions of a risk management plan, excluding the executive summary of the plan, consisting of an evaluation of 1 or more worst-case release scenarios or alternative release scenarios, and any electronic data base created by the Administrator from those portions.

(IV) Risk management plan

The term "risk management plan" means a risk management plan submitted to the Administrator by an owner or operator of a stationary source under subparagraph (B)(iii).

(ii) Regulations

Not later than 1 year after the date of enactment of this subparagraph, the President shall—

(I) assess—

(aa) the increased risk of terrorist and other criminal activity associated with the posting of off-site consequence analysis information on the Internet; and

(bb) the incentives created by public disclosure of off-site consequence analysis information for reduction in the risk of accidental releases; and

(II) based on the assessment under subclause (I), promulgate regulations governing the distribution of off-site consequence analysis information in a manner that, in the opinion of the President, minimizes the likelihood of accidental releases and the risk described in sub-

clause (I)(aa) and the likelihood of harm to public health and welfare, and—

(aa) allows access by any member of the public to paper copies of off-site consequence analysis information for a limited number of stationary sources located anywhere in the United States, without any geographical restriction;

(bb) allows other public access to off-site consequence analysis information as appropriate;

(cc) allows access for official use by a covered person described in any of items (cc) through (ff) of clause (i)(I) (referred to in this subclause as a 'State or local covered person') to off-site consequence analysis information relating to stationary sources located in the person's State;

(dd) allows a State or local covered person to provide, for official use, off-site consequence analysis information relating to stationary sources located in the person's State to a State or local covered person in a contiguous State; and

(ee) allows a State or local covered person to obtain for official use, by request to the Administrator, off-site consequence analysis information that is not available to the person under item (cc).

(iii) Availability under freedom of information act

(I) First year

Off-site consequence analysis information, and any ranking of stationary sources derived from the information, shall not be made available under section 552 of Title 5, during the 1–year period beginning on the date of enactment of this subparagraph.

(II) After first year

If the regulations under clause (ii) are promulgated on or before the end of the period described in subclause (I), off-site consequence analysis information covered by the regulations, and any ranking of stationary sources derived from the information, shall not be made available under section 552 of Title 5, after the end of that period.

(III) Applicability

Subclauses (I) and (II) apply to off-site consequence analysis information submitted to the Administrator before, on, or after the date of enactment of this subparagraph.

(iv) Availability of information during transition period

The Administrator shall make off-site consequence analysis information available to covered persons for official use in a manner that meets the requirements of items (cc)through (ee) of clause (ii)(II), and to the public in a form that does not make available any information concerning the identity or location of stationary sources, during the period—

(I) beginning on the date of enactment of this subparagraph; and

(II) ending on the earlier of the date of promulgation of the regulations under clause (ii) or the date that is 1 year after the date of enactment of this subparagraph.

(v) Prohibition on unauthorized disclosure of information by covered persons

(I) In general

Beginning on the date of enactment of this subparagraph, a covered person shall not disclose to the public off-site consequence analysis information in any form, or any statewide or national ranking of identified stationary sources derived from such information, except as authorized by this subparagraph (including the regulations promulgated under clause (ii)). After the end of the 1–year period beginning on the date of enactment of this subparagraph, if regulations have not been promulgated under clause (ii), the preceding sentence shall not apply.

(II) Criminal penalties

Notwithstanding section 7413 of this title, a covered person that willfully violates a restriction or prohibition established by this subparagraph (including the regulations promulgated under clause (ii)) shall, upon conviction, be fined for an infraction under section 3571 of Title 18, (but shall not be subject to imprisonment) for each unauthorized disclosure of off-site consequence analysis information, except that subsection (d) of such section 3571 shall not apply to a case in which the offense results in pecuniary loss unless the defendant knew that such loss would occur. The disclosure of off-site consequence analysis information for each specific stationary source shall be considered a separate offense. The total of all penalties that may be imposed on a single person or organization under this item shall not exceed $1,000,000 for violations committed during any 1 calendar year.

(III) Applicability

If the owner or operator of a stationary source makes off-site consequence analysis information relating to that stationary source available to the public without restriction—

(aa) subclauses (I) and (II) shall not apply with respect to the information; and

(bb) the owner or operator shall notify the Administrator of the public availability of the information.

(IV) List

The Administrator shall maintain and make publicly available a list of all stationary sources that have provided notification under subclause (III)(bb).

(vi) Notice

The Administrator shall provide notice of the definition of official use as provided in clause (i)(III) and examples of actions that would and would not meet that definition, and notice of the restrictions on further dissemination and the penalties established by this Act to each covered person who receives off-site consequence analysis information under clause (iv) and each covered person who receives off-site consequence analysis information for an official use under the regulations promulgated under clause (ii).

(vii) Qualified researchers

(I) In general

Not later than 180 days after the date of enactment of this subparagraph, the Administrator, in consultation with the Attorney General, shall develop and implement a system for providing off-site consequence analysis information, including facility identification, to any qualified researcher, including a qualified researcher from industry or any public interest group.

(II) Limitation on dissemination

The system shall not allow the researcher to disseminate, or make available on the Internet, the off-site consequence analysis information, or any portion of the off-site consequence analysis information, received under this clause.

(viii) Read-only information technology system

In consultation with the Attorney General and the heads of other appropriate Federal agencies, the Administrator shall establish an information technology system that provides for the availability to the public of off-site consequence analysis information by means of a central data base under the control of the Federal Government that contains information that users may read, but that provides no means by which an electronic or mechanical copy of the information may be made.

(ix) Voluntary industry accident prevention standards

The Environmental Protection Agency, the Department of Justice, and other appropriate agencies may provide technical assistance to owners and operators of stationary sources and participate in the development of voluntary industry standards that will help achieve the objectives set forth in paragraph (1).

(x) Effect on State or local law

(I) In general

Subject to subclause (II), this subparagraph (including the regulations promulgated under this subparagraph) shall supersede any provision of State or local law that is inconsistent with this subparagraph (including the regulations).

(II) Availability of information under State law

Nothing in this subparagraph precludes a State from making available data on the off-site consequences of chemical releases collected in accordance with State law.

(xi) Report

(I) In general

Not later than 3 years after the date of enactment of this subparagraph, the Attorney General, in consultation with appropriate State, local, and Federal Government agencies, affected industry, and the public, shall submit to Congress a report that describes the extent to which regulations promulgated under this paragraph have resulted in actions, including the design and maintenance of safe facilities, that are effective in detecting, preventing, and minimizing the consequences of releases of regulated substances that may be caused by criminal activity. As part of this report, the Attorney General, using available data to the extent possible, and a sampling of covered stationary sources selected at the discretion of the Attorney General, and in consultation with appropriate State, local, and Federal governmental agencies, affected industry, and the public, shall review the vulnerability of covered stationary sources to criminal and terrorist activity, current industry practices regarding site security, and security of transportation of regulated substances. The Attorney General shall submit this report, containing the results of the review, together with recommendations, if any, for reducing vulnerability of covered stationary sources to criminal and terrorist activity, to the Committee on Commerce of the United States House of Representatives and the Committee on Environment and Public Works of the United States Senate and other relevant committees of Congress.

(II) Interim report

Not later than 12 months after the date of enactment of this subparagraph, the Attorney General shall submit to the Committee on Commerce of the United States House of Representatives and the Committee on Environment and Public Works of the United States Senate, and other relevant committees of Congress, an interim report that includes, at a minimum—

(aa) the preliminary findings under subclause (I);

(bb) the methods used to develop the findings; and

(cc) an explanation of the activities expected to occur that could cause the findings of the report under subclause (I) to be different than the preliminary findings.

(III) Availability of information

Information that is developed by the Attorney General or requested by the Attorney General and received from a covered stationary source for the purpose of conducting the review under subclauses(I) and (II) shall be exempt from disclosure under section 552 of Title 5, if such information would pose a threat to national security.

(xii) Scope

This subparagraph—

(I) applies only to covered persons; and

(II) does not restrict the dissemination of off-site consequence analysis information by any covered person in any manner or form except in the form of a risk management plan or an electronic data base created by the Administrator from off-site consequence analysis information.

(xiii) Authorization of appropriations

There are authorized to be appropriated to the Administrator and the Attorney General such sums as are necessary to carry out this subparagraph (including the regulations promulgated under clause (ii)), to remain available until expended.

(8) Research on hazard assessments

The Administrator may collect and publish information on accident scenarios and consequences covering a range of possible events for substances listed under paragraph (3). The Administrator shall establish a program of long-term research to develop and disseminate information on methods and techniques for hazard assessment which may be useful in improving and validating the procedures employed in the preparation of hazard assessments under this subsection.

(9) Order authority

(A) In addition to any other action taken, when the Administrator determines that there may be an imminent and substantial endangerment to the human health or welfare or the environment because of an actual or threatened accidental release of a regulated substance, the Administrator may secure such relief as may be necessary to abate such danger or threat, and the district court of the United States in the district in which the threat occurs shall have jurisdiction to grant such relief as the public interest and the equities of the case may require. The Administrator may also, after notice to the State in which the stationary source is located, take other action under this paragraph including, but not limited to, issuing such orders as may be necessary to protect human health. The Administrator shall take action under section 7603 of this title rather than this paragraph whenever the authority of such section is adequate to protect human health and the environment.

(B) Orders issued pursuant to this paragraph may be enforced in an action brought in the appropriate United States district court as if the order were issued under section 7603 of this title.

(C) Within 180 days after November 15, 1990, the Administrator shall publish guidance for using the order authorities established by this paragraph. Such guidance shall provide for the coordinated use of the authorities of this paragraph with other emergency powers authorized by section 9606 of this title, sections 311(c), 308, 309 and 504(a) of the Federal Water Pollution Control Act [33 U.S.C.A. §§ 1321(c), 1318, 1319 and 1364(a)], sections 3007, 3008, 3013, and 7003 of the Solid Waste Disposal Act [42 U.S.C.A. §§ 6927, 6928, 6934, and 6973], sections 1445 and 1431 of the Safe Drinking Water Act [42 U.S.C.A. §§ 300j–4 and 300i], sections 5 and 7 of the Toxic Substances Control Act [15 U.S.C.A. §§ 2604, 2606], and sections 7413, 7414, and 7603 of this title.

(10) Presidential review

The President shall conduct a review of release prevention, mitigation and response authorities of the various Federal agencies and shall clarify and coordinate agency responsibilities to assure the most effective and efficient implementation of such authorities and to identify any deficiencies in authority or resources which may exist. The President may utilize the resources and solicit the recommendations of the Chemical Safety and Hazard Investigation Board in conducting such review. At the conclusion of such review, but not later than 24 months after November 15, 1990, the President shall transmit a message to the Congress on the release prevention, mitigation and response activi-

ties of the Federal Government making such recommendations for change in law as the President may deem appropriate. Nothing in this paragraph shall be interpreted, construed or applied to authorize the President to modify or reassign release prevention, mitigation or response authorities otherwise established by law.

(11) State authority

Nothing in this subsection shall preclude, deny or limit any right of a State or political subdivision thereof to adopt or enforce any regulation, requirement, limitation or standard (including any procedural requirement) that is more stringent than a regulation, requirement, limitation or standard in effect under this subsection or that applies to a substance not subject to this subsection.

(s) Periodic report

Not later than January 15, 1993 and every 3 years thereafter, the Administrator shall prepare and transmit to the Congress a comprehensive report on the measures taken by the Agency and by the States to implement the provisions of this section. The Administrator shall maintain a database on pollutants and sources subject to the provisions of this section and shall include aggregate information from the database in each annual report. The report shall include, but not be limited to—

(1) a status report on standard-setting under subsections (d) and (f) of this section,

(2) information with respect to compliance with such standards including the costs of compliance experienced by sources in various categories and subcategories,

(3) development and implementation of the national urban air toxics program, and

(4) recommendations of the Chemical Safety and Hazard Investigation Board with respect to the prevention and mitigation of accidental releases.

(July 14, 1955, c. 360, Title I, § 112, as added Dec. 31, 1970, Pub.L. 91-604, § 4(a), 84 Stat. 1685, and amended Aug. 7, 1977, Pub.L. 95-95, Title I, §§ 109(d)(2), 110, Title IV, § 401(c), 91 Stat. 701, 703, 791; Nov. 9, 1978, Pub.L. 95-623, § 13(b), 92 Stat. 3458; Nov. 15, 1990, Pub.L. 101-549, Title III, § 301, 104 Stat. 2531; Dec. 4, 1991, Pub.L. 102-187, 105 Stat. 1285; Nov. 10, 1998, Pub.L. 105-362, Title IV, § 402(b), 112 Stat. 3283; Aug. 5, 1999, Pub.L. 106-40, §§ 2, 3(a), 113 Stat. 207.)

[1] So in original. Probably should be "effects".
[2] So in original.
[3] So in original. Probably should be "section".
[4] So in original. Probably should be "paragraph (7)(B)".
[5] So in original. Probably should be "subparagraph".

HISTORICAL AND STATUTORY NOTES

References in Text

The date of enactment, referred to in subsec. (a)(11), probably means the date of enactment of Pub.L. 101-549, which amended this section generally and was approved Nov. 15, 1990.

The Atomic Energy Act of 1954, referred to in subsec. (d)(9), is Act Aug. 30, 1954, c. 1073, 68 Stat. 919, as amended, which is classified generally to chapter 23 of this title (42 U.S.C.A. § 2011 et seq.). For complete classification of this Act to the Code, see Short Title of 1954 Acts note set out under 42 U.S.C.A. § 2011 and Tables.

The Federal Water Pollution Control Act, referred to in subsecs. (e)(5), (m)(1)(D), (m)(4), (m)(5)(D) and (r)(9)(C), is Act June 30, 1948, c. 758, as amended generally by Pub.L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 816, which is classified generally to chapter 26 (section 1251 et seq.) of Title 33, Navigation and Navigable Waters. Title II of the Federal Water Pollution Control Act, referred to in subsec. (e)(5), is classified generally to subchapter II (section 1281 et seq.) of Title 33. Section 320 of such Act, referred to in subsec. (m)(4), is classified to 33 U.S.C.A. § 1330. Sections 308, 309, 311(c) and 504(a) of such Act, referred to in subsec. (r)(9)(C), are classified to 33 U.S.C.A. §§ 1318, 1319, 1321(c), and 1364(a), respectively. For complete classification of this Act to the Code, see Short Title note set out under 33 U.S.C.A. § 1251 and Tables.

The Toxic Substances Control Act, referred to in subsecs. (k)(3)(C) and (r)(9)(C), is Pub.L. 94-469, Oct. 11, 1976, 90 Stat. 2003, as amended, which is classified generally to chapter 53 (section 2601 et seq.) of Title 15, Commerce and Trade. Sections 5 and 7 of such Act, referred to in subsec. (r)(9)(C), are classified to 15 U.S.C.A. §§ 2604 and 2606, respectively. For complete classification of this Act to the Code, see Short Title note set out under 15 U.S.C.A. § 2601 and Tables.

The Federal Insecticide, Fungicide, and Rodenticide Act, referred to in subsec. (k)(3)(C), is Act June 25, 1947, c. 125, as amended generally by Pub.L. 92-516, Oct. 21, 1972, 86 Stat. 973, which is classified generally to subchapter II (section 136 et seq.) of chapter 6 of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under 7 U.S.C.A. § 136 and Tables.

The Resource Conservation and Recovery Act of 1976, referred to in subsec. (k)(3)(C), is Pub.L. 94-580, Oct. 21, 1976, 90 Stat. 2795, as amended, which is classified generally to chapter 82 of this title (42 U.S.C.A. § 6901 et seq.). For complete classification of this Act to the Code, see Short Title of 1976 Acts note set out under 42 U.S.C.A. § 6901 and Tables.

The Safe Drinking Water Act, referred to in subsecs. (m)(1)(D), (m)(5)(D), and (r)(9)(C), is Pub.L. 93-523, Dec. 16, 1974, 88 Stat. 1660, as amended, which is classified principally to subchapter XII (section 300f et seq.) of chapter 6A of this title. Sections 1431 and 1445 of such Act, referred to in subsec. (r)(9)(C), are classified to 42 U.S.C.A. §§ 300i and 300j-4, respectively. For complete classification of this Act to the Code see Short Title of 1974 Amendments note set out under 42 U.S.C.A. § 201 and Tables.

The Solid Waste Disposal Act, referred to in subsecs. (n)(5), (n)(7), and (r)(9)(C), is Title II of Pub.L. 89-272, Oct. 20, 1965, 79 Stat. 997, as amended generally by Pub.L.

94–580, § 2, Oct. 21, 1976, 90 Stat. 2795, which is classified generally to chapter 82 of this title (42 U.S.C.A. § 6901 et seq.). Section 8002(m) of the Solid Waste Disposal Act, referred to in subsec. (n)(5), is classified to 42 U.S.C.A. § 6982(m). Subtitle C of such Act, referred to in subsec. (n)(7), is classified generally to subchapter III (section 6921 et seq.) of chapter 82 of this title. Sections 3007, 3008, 3013 and 7003 of such Act, referred to in subsec. (r)(9)(C), are classified to 42 U.S.C.A. §§ 6927, 6928, 6934, and 6973, respectively. For complete classification of this Act to the Code, see Short Title of 1976 Acts note set out under 42 U.S.C.A. § 6901 and Tables.

The Clean Air Act Amendments of 1990, referred to in subsecs. (o)(4), (q)(1), (q)(2) and (q)(3), is Pub.L. 101–549, Nov. 15, 1990, 104 Stat. 2399. Section 303 of such Act, referred to in subsec. (o)(4), is set out as a note under this section. For complete classification of this Act to the Code, see Tables.

The date of enactment of the Clean Air Act Amendments of 1990, referred to in subsec. (q)(1) to (3), is the date of enactment of Pub.L. 101–549, Nov. 15, 1990, 104 Stat. 2399, which was approved Nov. 15, 1990.

The Emergency Planning and Community Right-to-Know Act of 1986, referred to in subsec. (r)(3), is Title III of Pub.L. 99–499, Oct. 17, 1986, 100 Stat. 1728, which is classified generally to chapter 116 of this title (42 U.S.C.A. § 11001 et seq.). For complete classification of this Act to the Code, see Short Title of 1986 Amendments note set out under 42 U.S.C.A. § 11001 and Tables.

The Occupational Safety and Health Act of 1970, referred to in subsecs. (r)(6)(C)(ii), (r)(6)(K), and (L) is Pub.L. 91–596, Dec. 29, 1970, 84 Stat. 1590, as amended, which is classified principally to chapter 15 of Title 29, Labor (29 U.S.C.A. § 651 et seq.). For complete classification of this Act to the Code, see Short Title note set out under 29 U.S.C.A. § 651 and Tables.

The date of enactment of this subparagraph, referred to in subpar. (r)(7)(H), means the date of enactment of Pub.L. 106–40, 113 Stat. 207, which amended par. (r)(4) and enacted subpar. (r)(7)(H), and enacted note provisions under this section and 42 U.S.C.A. § 7401, and was approved Aug. 5, 1999.

This Act, referred to in subpar. (r)(7)(H), is the Chemical Safety Information Site Security and Fuels Regulatory Relief Act, Pub.L. 106–40, Aug. 5, 1999, 113 Stat. 207, which amended this section and enacted note provisions set out under this section and 42 U.S.C.A. § 7401.

Codifications

Section was formerly classified to section 1857c–7 of this title.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Termination of Reporting Requirements

For termination, effective May 15, 2000, of reporting provisions of subsec. (n)(2)(C) of this section, pertaining to the coke oven production technology study, see Pub.L. 104–66, § 3003, as amended, set out as a note under 31 U.S.C.A. § 1113, and the 10th item on page 87 of House Document No. 103–7, referencing Pub.L. 101–549, § 301 (104 Stat. 2559), on which page the report pertaining to the coke oven production technology study is found.

For termination, effective May 15, 2000, of provisions of law requiring submittal to Congress of any annual, semiannual, or other regular periodic report listed in House Document No. 103–7 (in which reports required under subsecs. (f), (m)(5), (r)(6)(C)(ii), and (s) of this section are listed, respectively, as the 16th item on p. 164, the 8th item on page 162, the 9th item on page 198, and the 9th item on page 162), see Pub.L. 104–66, § 3003, as amended, set out as a note under 31 U.S.C.A. § 1113.

Change of Name

Any reference in any provision of law enacted before Jan. 4, 1995, to the Committee on Energy and Commerce of the House of Representatives treated as referring to the Committee on Commerce of the House of Representatives, except that any reference in any provision of law enacted before Jan. 4, 1995, to the Committee on Energy and Commerce of the House of Representatives treated as referring to the Committee on Agriculture of the House of Representatives, in the case of a provision of law relating to inspection of seafood or seafood products, the Committee on Banking and Financial Services of the House of Representatives, in the case of a provision of law relating to bank capital markets activities generally or to depository institution securities activities generally, and the Committee on Transportation and Infrastructure of the House of Representatives, in the case of a provision of law relating to railroads, railway labor, or railroad retirement and unemployment (except revenue measures related thereto), see section 1(a)(4) and (c)(1) of Pub.L. 104–14, set out as a note preceding 2 U.S.C.A. § 21.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under 42 U.S.C.A. § 7401.

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub.L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub.L. 95–95, see section 406(a) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under 42 U.S.C.A. § 7401.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue

in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

Public Meeting During Moratorium Period

Pub.L. 106–40, § 4, Aug. 5, 1999, 113 Stat. 214, provided that:

"(a) **In general.**—Not later than 180 days after the date of enactment of this Act [August 5, 1999], each owner or operator of a stationary source covered by section 112(r)(7)(B)(ii) of the Clean Air Act [42 U.S.C.A. § 7412(r)(7)(B)(ii)] shall convene a public meeting, after reasonable public notice, in order to describe and discuss the local implications of the risk management plan submitted by the stationary source pursuant to section 112(r)(7)(B)(iii) of the Clean Air Act [42 U.S.C.A. § 7412(r)(7)(B)(iii)], including a summary of the off-site consequence analysis portion of the plan. Two or more stationary sources may conduct a joint meeting. In lieu of conducting such a meeting, small business stationary sources as defined in section 507(c)(1) of the Clean Air Act [42 U.S.C.A. § 7661f(c)(1)] may comply with this section by publicly posting a summary of the off-site consequence analysis information for their facility not later than 180 days after the enactment of this Act [August 5, 1999]. Not later than 10 months after the date of enactment of this Act [August 5, 1999], each such owner or operator shall send a certification to the director of the Federal Bureau of Investigation stating that such meeting has been held, or that such summary has been posted, within 1 year prior to, or within 6 months after, the date of the enactment of this Act [August 5, 1999]. This section shall not apply to sources that employ only Program 1 processes within the meaning of regulations promulgated under section 112(r)(7)(B)(i) of the Clean Air Act [42 U.S.C.A. § 7412(r)(7)(B)(i)].

"(b) **Enforcement.**—The Administrator of the Environmental Protection Agency may bring an action in the appropriate United States district court against any person who fails or refuses to comply with the requirements of this section, and such court may issue such orders, and take such other actions, as may be necessary to require compliance with such requirements."

Reevaluation of Regulations

Pub.L. 106–40, § 3(c), Aug. 5, 1999, 113 Stat. 213, provided that: "The President shall reevaluate the regulations promulgated under this section within 6 years after the enactment of this Act [Chemical Safety Information, Site Security and Fuels Regulatory Relief Act, Pub.L. 106–40, Aug. 5, 1999, 113 Stat. 207]. If the President determines not to modify such regulations, the President shall publish a notice in the Federal Register stating that such reevaluation has been completed and that a determination has been made not to modify the regulations. Such notice shall include an explanation of the basis of such decision."

Reports

Pub.L. 106–40, § 3(b), Aug. 5, 1999, 113 Stat. 213, provided that:

"(1) **Definition of accidental release.**—In this subsection, the term 'accidental release' has the meaning given the term in section 112(r)(2) of the Clean Air Act (42 U.S.C. 7412(r)(2)).

"(2) **Report on status of certain amendments.**—Not later than 2 years after the date of enactment of this Act [Aug. 5, 1999], the Comptroller General of the United States shall submit to Congress a report on the status of the development of amendments to the National Fire Protection Association Code for Liquefied Petroleum Gas that will result in the provision of information to local emergency response personnel concerning the off-site effects of accidental releases of substances exempted from listing under section 112(r)(4)(B) of the Clean Air Act [42 U.S.C.A. § 7412(r)(4)(B)] (as added by section 3) [sic; probably should be section 2 of Pub.L. 106–40, Aug. 5, 1999, 113 Stat. 207, which added subsec. (r)(4)(B)].

"(3) **Report on compliance with certain information submission requirements.**—Not later than 3 years after the date of enactment of this Act [Aug. 5, 1999], the Comptroller General of the United States shall submit to Congress a report that—

"(A) describes the level of compliance with Federal and State requirements relating to the submission to local emergency response personnel of information intended to help the local emergency response personnel respond to chemical accidents or related environmental or public health threats; and

"(B) contains an analysis of the adequacy of the information required to be submitted and the efficacy of the methods for delivering the information to local emergency response personnel."

Risk Assessment and Management Commission

Pub.L. 101–549, § 303, Nov. 15, 1990, 104 Stat. 2574, provided that:

"(a) **Establishment.**—There is hereby established a Risk Assessment and Management Commission (hereafter referred to in this section as the "Commission"), which shall commence proceedings not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990] and which shall make a full investigation of the policy implications and appropriate uses of risk assessment and risk management in regulatory programs under various Federal laws to prevent cancer and other chronic human health effects which may result from exposure to hazardous substances.

"(b) **Charge.**—The Commission shall consider—

"(1) the report of the National Academy of Sciences authorized by section 112(o) of the Clean Air Act [subsec. (o) of this section], the use and limitations of risk assessment in establishing emission or effluent standards, ambient standards, exposure standards, acceptable concentration levels, tolerances or other environmental criteria for hazardous substances that present a risk of carcinogenic effects or other chronic health effects and the suitability of risk assessment for such purposes;

"(2) the most appropriate methods for measuring and describing cancer risks or risks of other chronic health effects from exposure to hazardous substances considering such alternative approaches as the lifetime risk of cancer or other effects to the individual or individuals most exposed to emissions from a source or sources on both an actual and worst case basis, the range of such risks, the total number of health effects avoided by exposure reduc-

tions, effluent standards, ambient standards, exposures standards, acceptable concentration levels, tolerances and other environmental criteria, reductions in the number of persons exposed at various levels of risk, the incidence of cancer, and other public health factors;

"(3) methods to reflect uncertainties in measurement and estimation techniques, the existence of synergistic or antagonistic effects among hazardous substances, the accuracy of extrapolating human health risks from animal exposure data, and the existence of unquantified direct or indirect effects on human health in risk assessment studies;

"(4) risk management policy issues including the use of lifetime cancer risks to individuals most exposed, incidence of cancer, the cost and technical feasibility of exposure reduction measures and the use of site-specific actual exposure information in setting emissions standards and other limitations applicable to sources of exposure to hazardous substances; and

"(5) and comment on the degree to which it is possible or desirable to develop a consistent risk assessment methodology, or a consistent standard of acceptable risk, among various Federal programs.

"(c) **Membership.**—Such Commission shall be composed of ten members who shall have knowledge or experience in fields of risk assessment or risk management, including three members to be appointed by the President, two members to be appointed by the Speaker of the House of Representatives, one member to be appointed by the Minority Leader of the House of Representatives, two members to be appointed by the Majority Leader of the Senate, one member to be appointed by the Minority Leader of the Senate, and one member to be appointed by the President of the National Academy of Sciences. Appointments shall be made not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990].

"(d) **Assistance from agencies.**—The Administrator of the Environmental Protection Agency and the heads of all other departments, agencies, and instrumentalities of the executive branch of the Federal Government shall, to the maximum extent practicable, assist the Commission in gathering such information as the Commission deems necessary to carry out this section subject to other provisions of law.

"(e) **Staff and contracts.**—

"(1) In the conduct of the study required by this section, the Commission is authorized to contract (in accordance with Federal contract law) with nongovernmental entities that are competent to perform research or investigations within the Commission's mandate, and to hold public hearings, forums, and workshops to enable full public participation.

"(2) The Commission may appoint and fix the pay of such staff as it deems necessary in accordance with the provisions of title 5, United States Code [Title 5, Government Organization and Employees]. The Commission may request the temporary assignment of personnel from the Environmental Protection Agency or other Federal agencies.

"(3) The members of the Commission who are not officers or employees of the United States, while attending conferences or meetings of the Commission or while otherwise serving at the request of the Chair, shall be entitled to receive compensation at a rate not in excess of the maximum rate of pay for Grade GS–18, as provided in the General Schedule under section 5332 of title 5 of the United States Code [section 5332 of Title 5], including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence as authorized by law for persons in the Government service employed intermittently.

"(f) **Report.**—A report containing the results of all Commission studies and investigations under this section, together with any appropriate legislative recommendations or administrative recommendations, shall be made available to the public for comment not later than 42 months after the date of enactment of the Clean Air Act Amendments of 1990 [Nov. 15, 1990] and shall be submitted to the President and to the Congress not later than 48 months after such date of enactment. In the report, the Commission shall make recommendations with respect to the appropriate use of risk assessment and risk management in Federal regulatory programs to prevent cancer or other chronic health effects which may result from exposure to hazardous substances. The Commission shall cease to exist upon the date determined by the Commission, but not later than 9 months after the submission of such report.

"(g) **Authorization.**—There are authorized to be appropriated such sums as are necessary to carry out the activities of the Commission established by this section."

[For termination, effective May 15, 2000, of reporting provisions pertaining to the activities of the Commission of Pub.L. 101–549, § 303(f) set out above, see Pub.L. 104–66, § 3003, as amended, set out as a note under 31 U.S.C.A. § 1113, and the 13th item on page 190 of House Document No. 103–7.]

§ 7413. Federal enforcement

[CAA § 113]

(a) In general

(1) Order to comply with SIP

Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the State in which the plan applies of such finding. At any time after the expiration of 30 days following the date on which such notice of a violation is issued, the Administrator may, without regard to the period of violation (subject to section 2462 of Title 28)—

(A) issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit,

(B) issue an administrative penalty order in accordance with subsection (d) of this section, or

(C) bring a civil action in accordance with subsection (b) of this section.

HISTORICAL AND STATUTORY NOTES

Codifications

Section was formerly classified to section 1857c–8 of this title.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Transfer of Functions

The Federal Power Commission was terminated and its functions, personnel, property, funds, etc. were transferred to the Secretary of Energy (except for certain functions which were transferred to the Federal Energy Regulatory Commission) by sections 7151(b), 7171(a), 7172(a), 7291, and 7293 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for; see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub.L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub.L. 95–95, see section 406(a) of Pub.L. 95–95, set out as an Effective Date of 1977 Acts note under section 7401 of this title.

Short Title

1981 Amendments. Citation of Pub.L. 97–23, which enacted subsec. (e) of this section, as the "Steel Industry Compliance Extension Act of 1981", see section 1 of Pub.L. 97–23, set out as a note under section 7401 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective Date of 1977 Acts note under section 7401 of this title.

§ 7414. Recordkeeping, inspections, monitoring, and entry

[CAA § 114]

(a) Authority of Administrator or authorized representative

For the purpose (i) of developing or assisting in the development of any implementation plan under section 7410 or section 7411(d) of this title, any standard of performance under section 7411 of this title, any emission standard under section 7412 of this title,, [1] or any regulation of solid waste combustion under section 7429 of this title, or any regulation under section 7429 of this title (relating to solid waste combustion), (ii) of determining whether any person is in violation of any such standard or any requirement of such a plan, or (iii) carrying out any provision of this chapter (except a provision of subchapter II of this chapter with respect to a manufacturer of new motor vehicles or new motor vehicle engines)—

(1) the Administrator may require any person who owns or operates any emission source, who manufactures emission control equipment or process equipment, who the Administrator believes may have information necessary for the purposes set forth in this subsection, or who is subject to any requirement of this chapter (other than a manufacturer subject to the provisions of section 7525(c) or 7542 of this title with respect to a provision of subchapter II of this chapter) on a one-time, periodic or continuous basis to—

(A) establish and maintain such records;

(B) make such reports;

(C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods;

(D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods and in such manner as the Administrator shall prescribe);

(E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical;

(F) submit compliance certifications in accordance with subsection (a)(3) of this section; and

(G) provide such other information as the Administrator may reasonably require; and

(2) the Administrator or his authorized representative, upon presentation of his credentials—

(A) shall have a right of entry to, upon, or through any premises of such person or in which any records required to be maintained under paragraph (1) of this section are located, and

(B) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under paragraph

(1), and sample any emissions which such person is required to sample under paragraph (1).[2]

(3) The[3] Administrator shall in the case of any person which is the owner or operator of a major stationary source, and may, in the case of any other person, require enhanced monitoring and submission of compliance certifications. Compliance certifications shall include (A) identification of the applicable requirement that is the basis of the certification, (B) the method used for determining the compliance status of the source, (C) the compliance status, (D) whether compliance is continuous or intermittent, (E) such other facts as the Administrator may require. Compliance certifications and monitoring data shall be subject to subsection (c) of this section. Submission of a compliance certification shall in no way limit the Administrator's authorities to investigate or otherwise implement this chapter. The Administrator shall promulgate rules to provide guidance and to implement this paragraph within 2 years after November 15, 1990.

(b) State enforcement

(1) Each State may develop and submit to the Administrator a procedure for carrying out this section in such State. If the Administrator finds the State procedure is adequate, he may delegate to such State any authority he has to carry out this section.

(2) Nothing in this subsection shall prohibit the Administrator from carrying out this section in a State.

(c) Availability of records, reports, and information to public; disclosure of trade secrets

Any records, reports or information obtained under subsection (a) of this section shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof, (other than emission data) to which the Administrator has access under this section if made public, would divulge methods or processes entitled to protection as trade secrets of such person, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of Title 18, except that such record, report, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter or when relevant in any proceeding under this chapter.

(d) Notice of proposed entry, inspection, or monitoring

(1) In the case of any emission standard or limitation or other requirement which is adopted by a State, as part of an applicable implementation plan or as part of an order under section 7413(d) of this title, before carrying out an entry, inspection, or monitoring under paragraph (2) of subsection (a) of this section with respect to such standard, limitation, or other requirement, the Administrator (or his representatives) shall provide the State air pollution control agency with reasonable prior notice of such action, indicating the purpose of such action. No State agency which receives notice under this paragraph of an action proposed to be taken may use the information contained in the notice to inform the person whose property is proposed to be affected of the proposed action. If the Administrator has reasonable basis for believing that a State agency is so using or will so use such information, notice to the agency under this paragraph is not required until such time as the Administrator determines the agency will no longer so use information contained in a notice under this paragraph. Nothing in this section shall be construed to require notification to any State agency of any action taken by the Administrator with respect to any standard, limitation, or other requirement which is not part of an applicable implementation plan or which was promulgated by the Administrator under section 7410(c) of this title.

(2) Nothing in paragraph (1) shall be construed to provide that any failure of the Administrator to comply with the requirements of such paragraph shall be a defense in any enforcement action brought by the Administrator or shall make inadmissible as evidence in any such action any information or material obtained notwithstanding such failure to comply with such requirements.

(July 14, 1955, c. 360, Title I, § 114, as added Dec. 31, 1970, Pub.L. 91–604, § 4(a), 84 Stat. 1687, and amended June 22, 1974, Pub.L. 93–319, § 6(a)(4), 88 Stat. 259; Aug. 7, 1977, Pub.L. 95–95, Title I, §§ 109(d)(3), 113, Title III, § 305(d), 91 Stat. 701, 709, 776; Nov. 16, 1977, Pub.L. 95–190, § 14(a)(22), (23), 91 Stat. 1400; Nov. 15, 1990, Pub.L. 101–549, Title III, § 302(c), Title VII, § 702(a), (b), 104 Stat. 2574, 2680, 2681.)

[1] So in original.

[2] The period probably should be "; and".

[3] So in original. Probably should not be capitalized.

HISTORICAL AND STATUTORY NOTES

References in Text

Section 7413(d) of this title, referred to in subsec. (d)(1), was amended generally by Pub.L. 101–549, Title VII, § 701, Nov. 15, 1990, 104 Stat. 2672, and, as so amended, no longer relates to final compliance orders.

Codifications

Section was formerly classified to section 1857c–9 of this title.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective Date of 1977 Acts note under section 7401 of this title.

Pending Actions and Proceedings

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub.L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub.L. 95–95, see section 406(a) of Pub.L. 95–95, set out as an Effective and Applicability Provisions of 1977 Acts note under section 7401 of this title.

§ 7415. International air pollution

[CAA § 115]

(a) Endangerment of public health or welfare in foreign countries from pollution emitted in United States

Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.

(b) Prevention or elimination of endangerment

The notice of the Administrator shall be deemed to be a finding under section 7410(a)(2)(H)(ii) of this title which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a) of this section. Any foreign country so affected by such emission of pollutant or pollutants shall be invited to appear at any public hearing associated with any revision of the appropriate portion of the applicable implementation plan.

(c) Reciprocity

This section shall apply only to a foreign country which the Administrator determines has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by this section.

(d) Recommendations

Recommendations issued following any abatement conference conducted prior to August 7, 1977, shall remain in effect with respect to any pollutant for which no national ambient air quality standard has been established under section 7409 of this title unless the Administrator, after consultation with all agencies which were party to the conference, rescinds any such recommendation on grounds of obsolescence.

(July 14, 1955, c. 360, Title I, § 115, formerly § 5, as added Dec. 17, 1963, Pub.L. 88–206, § 1, 77 Stat. 396, renumbered § 105 and amended Oct. 20, 1965, Pub.L. 89–272, Title I, §§ 101(2), (3), 102, 79 Stat. 992, 995, renumbered § 108 and amended Nov. 21, 1967, Pub.L. 90–148, § 2, 81 Stat. 491, renumbered § 115 and amended Dec. 31, 1970, Pub.L. 91–604, §§ 4(a), (b)(2) to (10), 15(c)(2), 84 Stat. 1678, 1688, 1689, 1713; Aug. 7, 1977, Pub.L. 95–95, Title I, § 114, 91 Stat. 710.)

HISTORICAL AND STATUTORY NOTES

Codifications

Section was formerly classified to section 1857d of this title.

Effective and Applicability Provisions

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Prior Provisions

A prior section 5 of Act July 14, 1955, c. 360, 69 Stat. 322, as amended Sept. 22, 1959, Pub.L. 86–365, § 1, 73 Stat. 646; Oct. 9, 1962, Pub.L. 87–761, § 1, 76 Stat. 760, which was classified to a prior section 1857d of this title prior to the general amendment of this chapter by Pub.L. 88–206, related to appropriations, grants-in-aid, and contracts.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95

this prohibition to other facilities owned or operated by the convicted person.

(b) Notification procedures

The Administrator shall establish procedures to provide all Federal agencies with the notification necessary for the purposes of subsection (a) of this section.

(c) Federal agency contracts

In order to implement the purposes and policy of this chapter to protect and enhance the quality of the Nation's air, the President shall, not more than 180 days after December 31, 1970, cause to be issued an order (1) requiring each Federal agency authorized to enter into contracts and each Federal agency which is empowered to extend Federal assistance by way of grant, loan, or contract to effectuate the purpose and policy of this chapter in such contracting or assistance activities, and (2) setting forth procedures, sanctions, penalties, and such other provisions, as the President determines necessary to carry out such requirement.

(d) Exemptions; notification to Congress

The President may exempt any contract, loan, or grant from all or part of the provisions of this section where he determines such exemption is necessary in the paramount interest of the United States and he shall notify the Congress of such exemption.

(e) Omitted

(July 14, 1955, c. 360, Title III, § 306, as added Dec. 31, 1970, Pub.L. 91–604, § 12(a), 84 Stat. 1707, and amended Nov. 15, 1990, Pub.L. 101–549, Title VII, § 705, 104 Stat. 2682.)

HISTORICAL AND STATUTORY NOTES

Codifications

Section was formerly classified to section 1857h–4 of this title.

Subsec. (e) of this section, shown as omitted, which required the President to annually report to Congress on measures taken toward implementing the purpose and intent of this section, terminated, effective May 15, 2000, pursuant to section 3003 of Pub.L. 104–66, as amended, set out as a note under 31 U.S.C.A. § 1113. See, also, the 14th item on page 20 of House Document No. 103–7.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Prior Provisions

A prior § 306 of Act July 14, 1955, c. 360, Title III, as added Nov. 21, 1967, Pub.L. 90–148, § 2, 81 Stat. 506, was renumbered section 313 by Pub.L. 91–604, and is classified to former section 7613 of this title.

Another prior section 306 of Act July 14, 1955, c. 360, Title III, formerly § 13, as added Dec. 17, 1963, Pub.L. 88–206, § 1, 77 Stat. 401, renumbered § 306, Oct. 20, 1965, Pub.L. 89–272, Title I, § 101(4), 79 Stat. 992, renumbered § 309, Nov. 21, 1967, Pub.L. 90–148, § 2, 81 Stat. 506, renumbered § 316, Dec. 31, 1970, Pub.L. 91–604, § 12(a), 84 Stat. 1705, which related to appropriations, was classified to prior section 1857*l* of this title and was repealed by section 306 of Pub.L. 95–95. See section 7626 of this title.

Federal Acquisition Regulation: Contractor Certification or Contract Clause for Acquisition of Commercial Items

Pub.L. 103–355, Title VIII, § 8301(g), Oct. 13, 1994, 108 Stat. 3397, provided that: "The Federal Acquisition Regulation may not contain a requirement for a certification by a contractor under a contract for the acquisition of commercial items, or a requirement that such a contract include a contract clause, in order to implement a prohibition or requirement of section 306 of the Clean Air Act (42 U.S.C. 7606) [this section] or a prohibition or requirement issued in the implementation of that section [this section], since there is nothing in such section 306 [this section] that requires such a certification or contract clause."

§ 7607. Administrative proceedings and judicial review

[CAA § 307]

(a) Administrative subpenas; confidentiality; witnesses

In connection with any determination under section 7410(f) of this title, or for purposes of obtaining information under section 7521(b)(4) or 7545(c)(3) of this title, any investigation, monitoring, reporting requirement, entry, compliance inspection, or administrative enforcement proceeding under the [1] chapter (including but not limited to section 7413, section 7414, section 7420, section 7429, section 7477, section 7524, section 7525, section 7542, section 7603, or section 7606 of this title),[2] the Administrator may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and he may administer oaths. Except for emission data, upon a showing satisfactory to the Administrator by such owner or operator that such papers, books, documents, or information or particular part thereof, if made public, would divulge trade secrets or secret processes of such owner or operator, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of Title 18, except that such paper, book, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter, to persons carrying out

the National Academy of Sciences' study and investigation provided for in section 7521(c) of this title, or when relevant in any proceeding under this chapter. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpena served upon any person under this subparagraph, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Administrator to appear and produce papers, books, and documents before the Administrator, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(b) Judicial review

(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, any emission standard or requirement under section 7412 of this title, any standard of performance or requirement under section 7411 of this title, any standard under section 7521 of this title (other than a standard required to be prescribed under section 7521(b)(1) of this title), any determination under section 7521(b)(5) of this title, any control or prohibition under section 7545 of this title, any standard under section 7571 of this title, any rule issued under section 7413, 7419, or under section 7420 of this title, or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. A petition for review of the Administrator's action in approving or promulgating any implementation plan under section 7410 of this title or section 7411(d) of this title, any order under section 7411(j) of this title, under section 7412 of this title,[2] under section 7419 of this title, or under section 7420 of this title, or his action under section 1857c-10(c)(2)(A), (B), or (C) of this title (as in effect before August 7, 1977) or under regulations thereunder, or revising regulations for enhanced monitoring and compliance certification programs under section 7414(a)(3) of this title, or any other final action of the Administrator under this chapter (including any denial or disapproval by the Administrator under subchapter I of this chapter) which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit. Notwithstanding the preceding sentence a petition for review of any action referred to in such sentence may be filed only in the United States Court of Appeals for the District of Columbia if such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination. Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. Where a final decision by the Administrator defers performance of any nondiscretionary statutory action to a later time, any person may challenge the deferral pursuant to paragraph (1).

(c) Additional evidence

In any judicial proceeding in which review is sought of a determination under this chapter required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, in such manner and upon such terms and conditions as to [3] the court may deem proper. The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.

(d) Rulemaking

(1) This subsection applies to—

(A) the promulgation or revision of any national ambient air quality standard under section 7409 of this title,

(B) the promulgation or revision of an implementation plan by the Administrator under section 7410(c) of this title,

(C) the promulgation or revision of any standard of performance under section 7411 of this title, or emission standard or limitation under section

7412(d) of this title, any standard under section 7412(f) of this title, or any regulation under section 7412(g)(1)(D) and (F) of this title, or any regulation under section 7412(m) or (n) of this title,

(D) the promulgation of any requirement for solid waste combustion under section 7429 of this title,

(E) the promulgation or revision of any regulation pertaining to any fuel or fuel additive under section 7545 of this title,

(F) the promulgation or revision of any aircraft emission standard under section 7571 of this title,

(G) the promulgation or revision of any regulation under subchapter IV–A of this chapter (relating to control of acid deposition),

(H) promulgation or revision of regulations pertaining to primary nonferrous smelter orders under section 7419 of this title (but not including the granting or denying of any such order),

(I) promulgation or revision of regulations under subchapter VI of this chapter (relating to stratosphere and ozone protection),

(J) promulgation or revision of regulations under part C of subchapter I of this chapter (relating to prevention of significant deterioration of air quality and protection of visibility),

(K) promulgation or revision of regulations under section 7521 of this title and test procedures for new motor vehicles or engines under section 7525 of this title, and the revision of a standard under section 7521(a)(3) of this title,

(L) promulgation or revision of regulations for noncompliance penalties under section 7420 of this title,

(M) promulgation or revision of any regulations promulgated under section 7541 of this title (relating to warranties and compliance by vehicles in actual use),

(N) action of the Administrator under section 7426 of this title (relating to interstate pollution abatement),

(O) the promulgation or revision of any regulation pertaining to consumer and commercial products under section 7511b(e) of this title,

(P) the promulgation or revision of any regulation pertaining to field citations under section 7413(d)(3) of this title,

(Q) the promulgation or revision of any regulation pertaining to urban buses or the clean-fuel vehicle, clean-fuel fleet, and clean fuel programs under part C of subchapter II of this chapter,

(R) the promulgation or revision of any regulation pertaining to nonroad engines or nonroad vehicles under section 7547 of this title,

(S) the promulgation or revision of any regulation relating to motor vehicle compliance program fees under section 7552 of this title,

(T) the promulgation or revision of any regulation under subchapter IV–A of this chapter (relating to acid deposition),

(U) the promulgation or revision of any regulation under section 7511b(f) of this title pertaining to marine vessels, and

(V) such other actions as the Administrator may determine.

The provisions of section 553 through 557 and section 706 of Title 5 shall not, except as expressly provided in this subsection, apply to actions to which this subsection applies. This subsection shall not apply in the case of any rule or circumstance referred to in subparagraphs (A) or (B) of subsection 553(b) of Title 5.

(2) Not later than the date of proposal of any action to which this subsection applies, the Administrator shall establish a rulemaking docket for such action (hereinafter in this subsection referred to as a "rule"). Whenever a rule applies only within a particular State, a second (identical) docket shall be simultaneously established in the appropriate regional office of the Environmental Protection Agency.

(3) In the case of any rule to which this subsection applies, notice of proposed rulemaking shall be published in the Federal Register, as provided under section 553(b) of Title 5; shall be accompanied by a statement of its basis and purpose and shall specify the period available for public comment (hereinafter referred to as the "comment period"). The notice of proposed rulemaking shall also state the docket number, the location or locations of the docket, and the times it will be open to public inspection. The statement of basis and purpose shall include a summary of—

(A) the factual data on which the proposed rule is based;

(B) the methodology used in obtaining the data and in analyzing the data; and

(C) the major legal interpretations and policy considerations underlying the proposed rule.

The statement shall also set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by the Scientific Review Committee established under section 7409(d) of this title and the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, an explanation of the reasons for such differences. All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule.

(4)(A) The rulemaking docket required under paragraph (2) shall be open for inspection by the public at reasonable times specified in the notice of proposed rulemaking. Any person may copy documents contained in the docket. The Administrator shall provide copying facilities which may be used at the expense of the person seeking copies, but the Administrator may waive or reduce such expenses in such instances as the public interest requires. Any person may request copies by mail if the person pays the expenses, including personnel costs to do the copying.

(B)(i) Promptly upon receipt by the agency, all written comments and documentary information on the proposed rule received from any person for inclusion in the docket during the comment period shall be placed in the docket. The transcript of public hearings, if any, on the proposed rule shall also be included in the docket promptly upon receipt from the person who transcribed such hearings. All documents which become available after the proposed rule has been published and which the Administrator determines are of central relevance to the rulemaking shall be placed in the docket as soon as possible after their availability.

(ii) The drafts of proposed rules submitted by the Administrator to the Office of Management and Budget for any interagency review process prior to proposal of any such rule, all documents accompanying such drafts, and all written comments thereon by other agencies and all written responses to such written comments by the Administrator shall be placed in the docket no later than the date of proposal of the rule. The drafts of the final rule submitted for such review process prior to promulgation and all such written comments thereon, all documents accompanying such drafts, and written responses thereto shall be placed in the docket no later than the date of promulgation.

(5) In promulgating a rule to which this subsection applies (i) the Administrator shall allow any person to submit written comments, data, or documentary information; (ii) the Administrator shall give interested persons an opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions; (iii) a transcript shall be kept of any oral presentation; and (iv) the Administrator shall keep the record of such proceeding open for thirty days after completion of the proceeding to provide an opportunity for submission of rebuttal and supplementary information.

(6)(A) The promulgated rule shall be accompanied by (i) a statement of basis and purpose like that referred to in paragraph (3) with respect to a proposed rule and (ii) an explanation of the reasons for any major changes in the promulgated rule from the proposed rule.

(B) The promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period.

(C) The promulgated rule may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation.

(7)(A) The record for judicial review shall consist exclusively of the material referred to in paragraph (3), clause (i) of paragraph (4)(B), and subparagraphs (A) and (B) of paragraph (6).

(B) Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

(8) The sole forum for challenging procedural determinations made by the Administrator under this subsection shall be in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section) at the time of the substantive review of the rule. No interlocutory appeals shall be permitted with respect to such procedural determinations. In reviewing alleged procedural errors, the court may invalidate the rule only if the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made.

(9) In the case of review of any action of the Administrator to which this subsection applies, the court may reverse any such action found to be—

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or

(D) without observance of procedure required by law, if (i) such failure to observe such procedure is arbitrary or capricious, (ii) the requirement of paragraph (7)(B) has been met, and (iii) the condition of the last sentence of paragraph (8) is met.

(10) Each statutory deadline for promulgation of rules to which this subsection applies which requires promulgation less than six months after date of proposal may be extended to not more than six months after date of proposal by the Administrator upon a determination that such extension is necessary to afford the public, and the agency, adequate opportunity to carry out the purposes of this subsection.

(11) The requirements of this subsection shall take effect with respect to any rule the proposal of which occurs after ninety days after August 7, 1977.

(e) Other methods of judicial review not authorized

Nothing in this chapter shall be construed to authorize judicial review of regulations or orders of the Administrator under this chapter, except as provided in this section.

(f) Costs

In any judicial proceeding under this section, the court may award costs of litigation (including reasonable attorney and expert witness fees) whenever it determines that such award is appropriate.

(g) Stay, injunction, or similar relief in proceedings relating to noncompliance penalties

In any action respecting the promulgation of regulations under section 7420 of this title or the administration or enforcement of section 7420 of this title no court shall grant any stay, injunctive, or similar relief before final judgment by such court in such action.

(h) Public participation

It is the intent of Congress that, consistent with the policy of subchapter II of chapter 5 of Title 5, the Administrator in promulgating any regulation under this chapter, including a regulation subject to a deadline, shall ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided in section [4] 7407(d), 7502(a), 7511(a) and (b), and 7512(a) and (b) of this title.

(July 14, 1955, c. 360, Title III, § 307, as added Dec. 31, 1970, Pub.L. 91–604, § 12(a), 84 Stat. 1707, and amended Nov. 18, 1971, Pub.L. 92–157, Title III, § 302(a), 85 Stat. 464; June 22, 1974, Pub.L. 93–319, § 6(c), 88 Stat. 259; Aug. 7, 1977, Pub.L. 95–95, Title III, §§ 303(d), 305(a), (c), (f)–(h), 91 Stat. 772, 776, 777; Nov. 16, 1977, Pub.L. 95–190, § 14(a)(79), (80), 91 Stat. 1404; Nov. 15, 1990, Pub.L. 101–549, Title I, §§ 108(p), 110(5), Title III, § 302(g), (h), Title VII, §§ 702(c), 703, 706, 707(h), 710(b), 104 Stat. 2469, 2470, 2574, 2681–2684.)

[1] So in original. Probably should be "this".
[2] So in original.
[3] So in original. The word "to" probably should not appear.
[4] So in original. Probably should be "sections".

HISTORICAL AND STATUTORY NOTES

References in Text

Section 7521(b)(5) of this title, referred to in subsec. (b)(1), was repealed by Pub.L. 101–549, Title II, § 203(3), Nov. 15, 1990, 104 Stat. 2529.

Section 1857c–10(c)(2)(A), (B), or (C) of this title (as in effect before August 7, 1977), referred to in subsec. (b)(1), was in the original "section 119(c)(2)(A), (B), or (C) (as in effect before the date of enactment of the Clean Air Act Amendments of 1977)", meaning section 119 of Act July 14, 1955, c. 360, Title I, as added June 22, 1974, Pub.L. 93–319, § 3, 88 Stat. 248, (which was classified to section 1857c–10 of this title) as in effect prior to the enactment of Pub.L. 95–95, Aug. 7, 1977, 91 Stat. 691, effective Aug. 7, 1977. Section 112(b)(1) of Pub.L. 95–95 repealed section 119 of Act July 14, 1955, c. 360, Title I, as added by Pub.L. 93–319, and provided that all references to such section 119 in any subsequent enactment which supersedes Pub.L. 93–319 shall be construed to refer to section 113(d) of the Clean Air Act and to paragraph (5) thereof in particular which is classified to subsec. (d)(5) of section 7413 of this title. Section 7413(d) of this title was subsequently amended generally by Pub.L. 101–549, Title VII, § 701, Nov. 15, 1990, 104 Stat. 2672, and, as so amended, no longer relates to final compliance orders. Section 117(b) of Pub.L. 95–95 added a new section 119 of Act July 14, 1955, which is classified to section 7419 of this title.

Part C of subchapter I of this chapter, referred to in subsec. (d)(1)(J), was in the original "subtitle C of Title I", and was translated as reading "part C of Title I" to reflect the probable intent of Congress, because Title I does not contain subtitles.

Codifications

Section was formerly classified to section 1857h–5 of this title.

In subsec. (h), "subchapter II of chapter 5 of Title 5" was substituted for "the Administrative Procedures Act" on authority of Pub.L. 89–554, § 7(b), Sept. 6, 1966, 80 Stat. 631, the first section of which enacted Title 5, Government Organization and Employees.

Effective and Applicability Provisions

1990 Acts. Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

1977 Acts. Amendment by Pub.L. 95–95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub.L. 95–95, set out as a note under section 7401 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549,

except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Prior Provisions

A prior section 307 of Act July 14, 1955, c. 360, Title III, as added Nov. 21, 1967, Pub.L. 90–148, § 2, 81 Stat. 506, renumbered section 314, Dec. 31, 1970, Pub.L. 91–604, § 12(a), 84 Stat. 1705, which related to labor standards, is set out as section 7614 of this title.

Another prior section 307 of act July 14, 1955, c. 360, Title III, formerly § 14, as added Dec. 17, 1963, Pub.L. 88–206, § 1, 77 Stat. 401, was renumbered section 307 by Pub.L. 89–272, renumbered section 310 by Pub.L. 90–148, and renumbered section 317 by Pub.L. 91–604, and is set out as a Short Title of 1963 Acts note under section 7401 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective Date of 1977 Acts note under section 7401 of this title.

Pending Actions and Proceedings

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub.L. 95–95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub.L. 95–95, see section 406(a) of Pub.L. 95–95, set out as an Effective Date of 1977 Acts note under section 7401 of this title.

Termination of Advisory Committees

Advisory Committees established after Jan. 5, 1973, to terminate not later than the expiration of the two-year period beginning on the date of their establishment, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such two-year period, or in the case of a committee established by the Congress, its duration is otherwise provided for by law, see section 14 of Pub.L. 92–463, Oct. 6, 1972, 86 Stat. 776, set out in Appendix 2 to Title 5, Government Organization and Employees.

§ 7608. Mandatory licensing

[CAA § 308]

Whenever the Attorney General determines, upon application of the Administrator—

(1) that—

(A) in the implementation of the requirements of section 7411, 7412, or 7521 of this title, a right under any United States letters patent, which is being used or intended for public or commercial use and not otherwise reasonably available, is necessary to enable any person required to comply with such limitation to so comply, and

(B) there are no reasonable alternative methods to accomplish such purpose, and

(2) that the unavailability of such right may result in a substantial lessening of competition or tendency to create a monopoly in any line of commerce in any section of the country,

the Attorney General may so certify to a district court of the United States, which may issue an order requiring the person who owns such patent to license it on such reasonable terms and conditions as the court, after hearing, may determine. Such certification may be made to the district court for the district in which the person owning the patent resides, does business, or is found.

(July 14, 1955, c. 360, Title III, § 308, as added Dec. 31, 1970, Pub.L. 91–604, § 12(a), 84 Stat. 1708.)

HISTORICAL AND STATUTORY NOTES

Codifications

Section was formerly classified to section 1857h–6 of this title.

Prior Provisions

A prior section 308 of Act July 14, 1955, c. 360, Title III, formerly § 12, as added Dec. 17, 1963, Pub.L. 88–206, § 1, 77 Stat. 401, renumbered § 305, Oct. 20, 1965, Pub.L. 89–272, Title I, § 101(4), 79 Stat. 992, renumbered § 308, Nov. 21, 1967, Pub.L. 90–148, § 2, 81 Stat. 506, renumbered § 315, Dec. 31, 1970, Pub.L. 91–604, § 12(a), 84 Stat. 1705, which related to separability of provisions, is set out as section 7615 of this title.

Modification or Rescission of Rules, Regulations, Orders, Determinations, Contracts, Certifications, Authorizations, Delegations, and Other Actions

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to Act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub.L. 95–95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with Act July 14, 1955, as amended by Pub.L. 95–95 [this chapter], see section 406(b) of Pub.L. 95–95, set out as an Effective Date of 1977 Acts note under section 7401 of this title.

§ 7609. Policy review

[CAA § 309]

(a) Environmental impact

The Administrator shall review and comment in writing on the environmental impact of any matter relating to duties and responsibilities granted pursuant to this chapter or other provisions of the authority of the Administrator, contained in any (1) legislation proposed by any Federal department or agency, (2)

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(i) seven years after the date on which any waiver is granted to such source or portion thereof, or

(ii) four years after the date on which such source or portion thereof commences operation,

whichever is earlier.

(F) No waiver under this subsection shall apply to any portion of a source other than the portion on which the innovative technological system or systems of continuous emission reduction is used.

(2) (A) If a waiver under paragraph (1) is terminated under clause (ii) of paragraph (1) (D), the Administrator shall grant an extension of the requirements of this section for such source for such minimum period as may be necessary to comply with the applicable standard of performance under subsection (b) of this section. Such period shall not extend beyond the date three years from the time such waiver is terminated.

(B) An extension granted under this paragraph shall set forth emission limits and a compliance schedule containing increments of progress which require compliance with the applicable standards of performance as expeditiously as practicable and include such measures as are necessary and practicable in the interim to minimize emissions. Such schedule shall be treated as a standard of performance for purposes of subsection (e) of this section and section 113.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

SEC. 112. (a) For purposes of this section—

(1) The term "hazardous air pollutant" means an air pollutant to which no ambient air quality standard is applicable and which in the judgment of the Administrator causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

(2) The term "new source" means a stationary source the construction or modification of which is commenced after the Administrator proposes regulations under this section establishing an emission standard which will be applicable to such source.

(3) The terms "stationary source," "modification," "owner or operator" and "existing source" shall have the same meaning as such terms have under section 111 (a).

(b) (1) (A) The Administrator shall, within 90 days after the date of enactment of the Clean Air Amendments of 1970, publish (and shall from time to time thereafter revise) a list which includes each hazardous air pollutant for which he intends to establish an emission standard under this section.

(B) Within 180 days after the inclusion of any air pollutant in such list, the Administrator shall publish proposed regulations establishing emission standards for such pollutant together with a notice of a public hearing within thirty days. Not later than 180 days after such publication, the Administrator shall prescribe an emission standard for such pollutant, unless he finds, on the basis of information presented at such hearings, that such pollutant clearly is not a hazardous air pollutant. The Administrator shall establish any such standard at the level which in his judgment provides an ample margin of safety to protect the public health from such hazardous air pollutant.

(C) Any emission standard established pursuant to this section shall become effective upon promulgation.

(2) The Administrator shall, from time to time, issue information on pollution control techniques for air pollutants subject to the provisions of this section.

(c) (1) After the effective date of any emission standard under this section—

(A) no person may construct any new source or modify any existing source which, in the Administrator's judgment, will emit an air pollutant to which such standard applies unless the Administrator finds that such source if properly operated will not cause emissions in violation of such standard, and

(B) no air pollutant to which such standard applies may be emitted from any stationary source in violation of such standard, except that in the case of an existing source—

(i) such standard shall not apply until 90 days after its effective date, and

(ii) the Administrator may grant a waiver permitting such source a period of up to two years after the effective date of a standard to comply with the standard, if he finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

(2) The President may exempt any stationary source from compliance with paragraph (1) for a period of not more than two years if he finds that the technology to implement such standards is not available and the operation of such source is required for reasons of national security. An exemption under this paragraph may be extended for one or more additional periods, each period not to exceed two years. The President shall make a report to Congress with respect to each exemption (or extension thereof) made under this paragraph.

(d) (1) Each State may develop and submit to the Administrator a procedure for implementing and enforcing emission standards for hazardous air pollutants for stationary sources located in such State. If the Administrator finds the State procedure is adequate, he shall delegate to such State any authority he has under this Act to implement and enforce such standards.

(2) Nothing in this subsection shall prohibit the Administrator from enforcing any applicable emission standard under this section.

(e) (1) For purposes of this section, if in the judgment of the Administrator, it is not feasible to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, he may instead promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in his judgment is adequate to protect the public health from such pollutant or pollutants with an ample margin of safety. In the event the Administrator promulgates a design or equipment standard under this subsection, he shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(2) For the purpose of this subsection, the phrase "not feasible to prescribe or enforce an emission standard" means any situation in which the Administrator determines that (A) a hazardous pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State, or local law, or (B) the application of measurement methodology to a particular class of sources is not practicable due to technological or economic limitations.

(3) If after notice and opportunity for public hearing, any person establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such air pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

(4) Any standard promulgated under paragraph (1) shall be promulgated in terms of an emission standard whenever it becomes feasible to promulgate and enforce such standard in such terms.

FEDERAL ENFORCEMENT

SEC. 113. (a) (1) Whenever, on the basis of any information available to him, the Administrator finds that any person is in violation of any requirement of an applicable

ADDENDUM B – STANDING DECLARATIONS

DECLARATION OF R. DAVID BROWN

I, R. David Brown, make the following declaration:

1. I am a member of the Louisiana Environmental Action Network ("LEAN") and have been a member for approximately nine years. I worked as an employee of LEAN during 2001 and from approximately November 2005 until August 1, 2007.

2. I live and work within the Baton Rouge Metropolitan Area. I reside in a home in East Baton Rouge Parish approximately three miles from the Exxon Chemical Plant. I formerly lived in East Baton Rouge Parish for several years while I was in graduate school before temporarily leaving the area. I returned to East Baton Rouge Parish three years ago and plan to continue living there for the foreseeable future. Hazardous air pollution impairs my enjoyment of living in East Baton Rouge Parish.

3. Because I am exposed daily to the air in the Baton Rouge Area, I am concerned about potential injuries to my health from hazardous air pollution and unhealthy levels of ozone ("smog"). From my graduate work in Environmental Studies at Louisiana State University, I am aware that hazardous air pollutants can contribute to smog.

4. I am a long-distance runner, so I am especially concerned about the threat to my health from cancer-causing hazardous air pollutants and from breathing unsafe ozone levels on days when there are "Unhealthy" Ozone Day warnings in Baton Rouge—something that happens repeatedly. On days when the pollution is particularly bad, I can tell the difference in the air while I am out running because it becomes harder to breathe. I often wonder if it would be healthier for me to stay inside and sit on the couch on the bad air days rather than expose myself to the polluted air.

5. I have young nephews who live in the area and I am concerned about the effect of hazardous air pollutants on my nephews and other children in the area. I am aware that hazardous air pollutants pose a significant health risk to children.

7. I am aware from my work with LEAN that much of Baton Rouge's air pollution problem is due to emissions from industrial sources in the area. I am particularly concerned that EPA's actions will encourage old facilities to continue to use outdated methods and technology to control air pollution and will discourage existing industrial air polluters from installing better technology or using new methods to reduce their hazardous air pollution.

I declare, under penalty of perjury, that the foregoing is true and correct.

R. David Brown

R. David Brown, Declarant
617 Lakeland Drive
Baton Rouge, LA 70802

Executed on August, 3 2007.

4. I maintain a garden, spend time doing yard maintenance, and travel to local parks with my grandchildren. In the summer I boat with my grandchildren on the pond on my property, and in the winter I spend time outdoors with my grandchildren while they ice skate and sled on our property.

5. Although I greatly enjoy spending time outdoors, air pollution causes me to stay inside more and diminishes my enjoyment of outdoor activities. Air pollution often causes my husband and I to cut our outdoor activities short. When the air quality is poor, it is noticeable to me. On bad air days I stay inside if possible and limit my outdoor activities.

6. I oppose EPA's rule covering the synthetic organic chemical manufacturing industry because it fails to update outdated technology-based standards requiring control of hazardous air pollution and other types of harmful air pollution. I also oppose the rule because it fails to limit emissions in a way that would reduce excess cancer risks and other health hazards caused by hazardous air polluters to a level that Congress deemed would provide an ample margin of safety to protect public health. Without updated technology-based standards for hazardous air polluters, I will be exposed to more hazardous air pollution and other harmful air pollution than I would if the standards were updated. Due to the absence of emissions limitations that would reduce excess cancer risks to below one in one million, I will face a higher risk of cancer, as well as an increased risk of other health hazards caused by air pollution.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 7-30-07

Nancy Coslar

Nancy Coslar

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, LOUISIANA ENVIRONMENTAL ACTION NETWORK, Petitioners, v. ENVIRONMENTAL PROTECTION AGENCY, Respondent.	No. 07-1053

DECLARATION OF TOM COSLAR

I, Tom Coslar, declare as follows:

1. I am a member of the Natural Resources Defense Council and have been since 1996.

2. I reside at 1163 Kirk Road, Garnet Valley, Pennsylvania 19061. I have lived at this address for approximately 24 years. At least one (1) synthetic organic chemical manufacturing facility is located in my zip code, 19061: Sun Refining & Marketing Company, Green Street and Delaware Avenue, Pennsylvania 19061. HON Facility List, Docket Document EPA-HQ-OAR-2005-0475-0108.1 (attached). This facility is located approximately four miles from my home.

3. I live with my wife, Nancy Coslar. I am concerned about the health effects of emissions from chemical manufacturing facilities in my zip code for me and my wife. I am a lung cancer survivor. I have never been a smoker, but I have always been particularly sensitive to airborne pollutants, including smoke from automobile tailpipes and second-hand cigarette

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, LOUISIANA ENVIRONMENTAL ACTION NETWORK, Petitioners, v. ENVIRONMENTAL PROTECTION AGENCY, Respondent.	No. 07-1053

DECLARATION OF ELIZABETH EMBREY

I, Elizabeth Embrey, declare as follows:

1. I am a member of the Natural Resources Defense Council and have been since 2006.

2. I reside at 509 South Front Street, Wilmington, North Carolina 28401. I have lived at this address for more than 2 years.

3. At least one (1) synthetic organic chemical manufacturing facility is located in my zip code, 28401: Kosa, 4600 Highway 421 N, Wilmington, NC 28401. HON Facility List, Docket Document EPA-HQ-OAR-2005-0475-0108.1 (attached). This facility is located approximately 5 miles from my home.

4. I live with my husband. I am concerned about the health effects of emissions from chemical manufacturing facilities in my zip code for myself and my husband.

5. My husband and I walk our dog every day in the area around my home. We also occasionally kayak in the Cape Fear River, which is one block from my home. My husband, a

landscaper, works outside in the Wilmington area.

6. When the air quality is poor, it is noticeable to me. On bad air days I try not to take deep breaths. Because I do not have air conditioning in my car, I often roll down my windows to stay cool. However, on bad air days I do not roll down my windows despite the heat.

7. Although I greatly enjoy spending time outdoors, on bad air days, I avoid walking downtown because of the air pollution. Air pollution significantly diminishes my enjoyment of outdoor activities. The air pollution caused by facilities located north of my home is one of the reasons my husband and I always kayak south of our home on the Cape Fear River, away from the air pollution and towards the ocean. If there was less air pollution north of my home, we would kayak in that direction.

8. I oppose EPA's rule covering the synthetic organic chemical manufacturing industry because it fails to update outdated technology-based standards requiring control of hazardous air pollution and other types of harmful air pollution. I also oppose the rule because it fails to limit emissions in a way that would reduce excess cancer risks and other health hazards caused by hazardous air polluters to a level that Congress deemed would provide an ample margin of safety to protect public health. Without updated technology-based standards for hazardous air polluters, I will be exposed to more hazardous air pollution and other harmful air pollution than I would if the standards were updated. Due to the absence of emissions limitations that would reduce excess cancer risks to below one in one million, I will face a higher risk of cancer, as well as an increased risk of other health hazards caused by air pollution.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 6 Sept. 2009

Elizabeth Embrey

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, LOUISIANA ENVIRONMENTAL ACTION NETWORK, Petitioners, v. ENVIRONMENTAL PROTECTION AGENCY, Respondent.	Case No. 07-1053

DECLARATION OF LINDA LOPEZ

I, Linda Lopez, declare as follows:

1. I am the director of membership and public education at the Natural Resources Defense Council, Inc. ("NRDC").

2. My duties include supervising the preparation of materials that NRDC distributes to members and prospective members. Those materials describe NRDC and identify its mission.

3. NRDC is a membership organization incorporated under the laws of the State of New York. It is recognized as a not-for-profit corporation under section 501(c)(3) of the United States Internal Revenue Code.

4. NRDC's mission statement declares that "The Natural Resources Defense Council's purpose is to safeguard the Earth: its people, its plants and animals, and the natural systems on which all life depends." The mission statement goes on to declare that NRDC works "to restore the integrity of the elements that sustain life – air, land, and water – and to defend endangered natural places."

5. When an individual becomes a member of NRDC, his or her current residential address is recorded in NRDC's membership database. When a member renews his or her membership or otherwise makes a contribution to NRDC, the database entry reflecting the member's residential address is verified or updated.

6. NRDC currently has more than 421,550 members. There are NRDC members residing in each of the fifty United States and in the District of Columbia.

7. There are 13,388 NRDC members residing in the State of Texas, including 2,130 members living in or near Houston (*i.e.*, within Harris and Galveston Counties) and 181 members living in or near Corpus Christi (*i.e.*, Nueces and San Patricio Counties).

8. There are 1,443 NRDC members residing in the State of Louisiana, including 411 members living in or near Baton Rouge (*i.e.*, Ascension, East Baton Rouge, Iberville, Jefferson, Saint Charles and Saint James Parishes).

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 11, 2007.

Linda Lopez

DECLARATION OF GARY MILLER

I, Gary Miller, make the following declarations:

1. I am a member of the Louisiana Environmental Action Network ("LEAN") and have been a member for approximately five years. I became a member primarily because of my concern about the quality of the air in the Baton Rouge Area.

2. I hold a B.S. and M.S. in Chemical Engineering from University of Arkansas, and I received my PhD in Engineering Science from Louisiana State University. I have professional experience working as a research and design chemical engineer for various chemical companies, and have conducted research and authored peer-reviewed papers regarding chemical processes and releases. Since 1995, I have served as a consulting engineer and expert witness in state and federal lawsuits regarding chemical releases and Clean Air Act issues.

3. Through my educational background as a chemical engineer and my experience as an expert witness, I have become familiar with synthetic organic chemical manufacturers—particularly those in Louisiana—and the hazardous air pollutants they emit. I have learned how to review a facility's air pollution permits to determine whether it is a synthetic organic chemical manufacturer emitting hazardous organic air pollutants. From my review of the air permits of chemical facilities in the Baton Rouge area, I have determined that the ExxonMobil Chemical Company facility and Formosa Plastics Corporation, both in East Baton Rouge and Dow Chemical Company—Louisiana Division, in Iberville Parish emit hazardous organic air pollutants. As synthetic organic chemical manufacturers emitting hazardous organic air

pollutants, these facilities are subject to EPA's national emissions standards for hazardous air pollutants (NESHAP) for the synthetic organic chemical manufacturing industry.

4. I own a home within the Baton Rouge Metropolitan Area. My home is located within East Baton Rouge Parish approximately eight miles from the ExxonMobil Chemical Company plant. I have lived in this home for nine years and have lived in the Baton Rouge Metropolitan Area for twenty-three years. I plan to live in my current home or the Baton Rouge Metropolitan area for the foreseeable future.

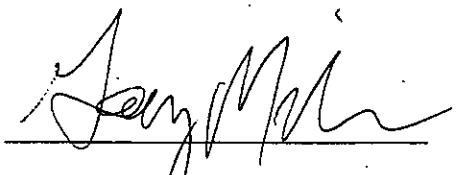
5. Because I am exposed daily to the air in the Baton Rouge Area, I am concerned about potential injuries to my health from unhealthy levels of hazardous organic air pollutants from the synthetic organic chemical manufacturers.

6. As a chemical engineer, I am also aware that many hazardous organic air pollutants are ozone precursors. Baton Rouge already has significant ozone problems. Not only is the area often in "nonattainment," but there are frequently "Unhealthy Ozone Day" warnings issued.

7. I enjoy working outside in my yard in the Baton Rouge Area, but I curtail my outdoor activities when unhealthy air warnings are issued. I also worry about the effects of hazardous air pollutants on my health.

8. I have reviewed EPA's national emission standards for organic hazardous air pollutants from the synthetic organic chemical manufacturing industry. I am concerned that EPA's final rule will encourage old facilities to continue to use outdated methods and technology to control air pollution and will discourage existing industrial air polluters from installing better technology or using new methods to reduce their hazardous air pollution.

I declare, under penalty of perjury, that the foregoing is true and correct.



Gary Miller
819 Maxine Dr.
Baton Rouge, LA 70808

Executed this 7 day of September, 2007.

DECLARATION OF MARYLEE ORR

I, Mary Lee Orr, make the following declarations:

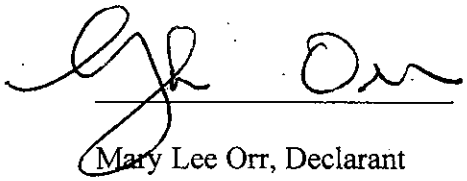
1. I am the Executive Director of the Louisiana Environmental Action Network ("LEAN"). I have been the organization's executive director since 1988. In my capacity as LEAN's Executive Director, I am familiar with LEAN's policies, its organizational structure and practices, and membership records.

2. LEAN is a non-profit Louisiana corporation with its principal place of business in Baton Rouge, Louisiana. LEAN is a state-wide environmental advocacy organization with more than 2,000 members, of whom approximately 500 are members residing within the five-parish Baton Rouge Metropolitan Area.

3. LEAN is committed to preserving Louisiana's natural resources and protecting the health of its communities through educational initiatives, legal advocacy, and legislative campaigns involving Louisiana citizens and grassroots organizations. The breadth of LEAN's involvement within Louisiana's environmental community is evidenced by its active partnerships with nearly one hundred community organizations from throughout the state and the continual work it performs in developing, implementing, and enforcing legislative and regulatory environmental safeguards.

4. LEAN is particularly interested in protecting public health and the environment in Louisiana from air pollution and has a long history of advocating for stronger measures to protect and enhance air quality in the state.

I declare, under penalty of perjury, that the foregoing is true and correct.



Mary Lee Orr, Declarant
Executive Director, LEAN
P.O. Box 66323
Baton Rouge, LA 70806

This 2 day of August, 2007.

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, LOUISIANA ENVIRONMENTAL ACTION NETWORK, Petitioners, v. ENVIRONMENTAL PROTECTION AGENCY, Respondent.	No. 07-1053

DECLARATION OF BOB PHILP, JR.

I, Bob Philp, Jr., declare as follows:

1. I am a member of the Natural Resources Defense Council and have been since 2006.

2. I reside at 4803 Quail Hollow Drive, Old Hickory, Tennessee 37138. I have lived at this address for more than two years.

3. My sister and nephew also live in Old Hickory, Tennessee.

4. At least one (1) synthetic organic chemical manufacturing facility is located in my zip code, 37138: Dupont, 1002 Industrial Rd., Old Hickory, Tennessee 37138. *See* HON Facility List, Docket Document EPA-HQ-OAR-2005-0475-0108.1 (attached). This facility is located approximately 4 miles from my home.

5. I am concerned about the health effects of emissions from the Dupont chemical manufacturing facility on me. I am also concerned about health effects for my sister and nephew, both of whom exercise outside.

6. I run and walk in the area around my home approximately three or four times a week. I ride my bike in this area about once a week. I also spend time outside working in my yard.

7. When the air quality is poor, it is noticeable to me. On bad air days, running outside is miserable. The physical symptoms I experience on these days includes wheezing, a tight feeling in the back of my throat, a bad taste in my mouth, fatigue, and a lack of stamina and energy.

8. The facility emits an extremely foul odor. I like to exercise outside; however, I do not go near the Dupont facility. I would probably exercise closer to the facility if it didn't smell so bad.

9. Due to air pollution, I limit my outdoor exercise activities to the first thing in the morning because the air pollution is worse later in the day. Although I greatly enjoy spending time outdoors, on bad air days I avoid outdoor exercise activities. Air pollution in my area diminishes my enjoyment of outdoor activities.

10. I believe the value of my house would increase if the Dupont facility did not emit such foul odors.

11. I oppose EPA's rule covering the synthetic organic chemical manufacturing industry because it fails to update outdated technology-based standards requiring control of hazardous air pollution and other types of harmful air pollution. I also oppose the rule because it fails to limit emissions in a way that would reduce excess cancer risks and other health hazards caused by hazardous air polluters to a level that Congress deemed would provide an ample margin of safety to protect public health. Without updated technology-based standards for hazardous air polluters, I will be exposed to more hazardous air pollution and other harmful air

pollution than I would if the standards were updated. Due to the absence of emissions limitations that would reduce excess cancer risks to below one in one million, I will face a higher risk of cancer, as well as an increased risk of other health hazards caused by air pollution.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 7/30/07

Bob Philip, Jr.

DECLARATION OF FLORENCE T. ROBINSON

I, Florence T. Robinson, make the following declarations:

1. I am a member of the Louisiana Environmental Action Network ("LEAN") and have been a member for approximately eighteen years. I am also a longtime member of the Board of Directors. I became a member primarily because of my concern about the quality of the air in the Baton Rouge Area.

2. I own the home where I live within the Baton Rouge Metropolitan Area. My home is located within East Baton Rouge Parish approximately 6 miles east of the Exxon Chemical Plant. I have lived in East Baton Rouge Parish for 36 years and plan to continue living there for the foreseeable future. Hazardous air pollution impairs my enjoyment of living in East Baton Rouge Parish.

3. From my work on the LEAN board, I am aware that the Baton Rouge area is home to several facilities that emit hazardous air pollutants. I have also learned that hazardous air pollutants can contribute to ozone pollution, and Baton Rouge already has problems with ozone. Because I am exposed daily to the air in the Baton Rouge Area, I am concerned about potential injuries to my health from hazardous air pollution and ozone within the Baton Rouge area.

4. I developed asthma when I was fifty years old and while I was living in East Baton Rouge Parish. I am aware that asthma is associated with industrial pollution and ozone.

5. I enjoy gardening and canoeing in the Baton Rouge Area, but I curtail these activities on days when the ozone forecast is on the high side of "Good" or worse. I also worry about what effect the hazardous air pollutants are having on my breathing.

6. I used to be very involved with dog training and dog showing. With the current air pollution and my lung condition, I can now barely walk my dogs. I am now involved with dog rescue, but because of air quality problems, there are some days when I am unable to participate because I need to stay indoors.

7. I am aware from my work on the LEAN board that much of Baton Rouge's air pollution problem is due to emissions from industrial sources in the area. I am particularly concerned that EPA's actions will encourage old facilities to continue to use outdated methods and technology to control air pollution and will discourage existing industrial air polluters from installing better technology or using new methods to reduce their hazardous air pollution.

I declare, under penalty of perjury, that the foregoing is true and correct.

Florence T. Robinson

Florence T. Robinson, Declarant
9546 W. Pomona Drive
Baton Rouge, LA 70815

Executed on August, 2 2007

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, LOUISIANA ENVIRONMENTAL ACTION NETWORK, Petitioners, v. ENVIRONMENTAL PROTECTION AGENCY, Respondent.	No. 07-1053

DECLARATION OF MARSHA SVATOPOLSKY

I, Marsha Svatopolsky, declare as follows:

1. I am a member of the Natural Resources Defense Council and have been since 2006.

2. I reside at 11605 Caliche Creek Drive, Corpus Christi, Texas 78410. I have lived at this address for at least 10 years. At least two (2) synthetic organic chemical manufacturing facilities are located in my zip code, 78410: Equistar Chemicals (Oxychem), 1501 McKinzie Road, Corpus Christi, Texas 78410; and Koch Refining Company, at the intersection of Suntide Road and Upriver Road, Corpus Christi, Texas 78410. Each of these facilities is located within approximately 4 miles of my home.

3. An additional four (4) synthetic organic chemical manufacturing facilities are located within approximately ten (10) miles of my home: Citgo Refining and Chemicals Company, 1802 Nueces Bay Blvd., Corpus Christi, Texas 78469; Coastal Refining and Marketing Inc., 1300 Cantwell Lane, Corpus Christi, Texas 78403; Valero Refining Company,

5900 Upriver Road, Corpus Christi, Texas 78407; and Occidental Chem (Oxychem), Highway 361, Ingleside, Texas 78359. At least one (1) additional synthetic organic chemical manufacturing facility is located within my home county, Nueces County: Ticona Polymers, Inc., at the intersection of Highway 77 and County Road, Bishop, Texas 78343.

4. I live with my husband. I am concerned about the health effects of emissions from chemical manufacturing facilities located near my home for me and my husband. My husband is prone to sinus infections and has recently had surgery to remove nasal polyps. I am particularly concerned about cancer. The prior owner of my home had cancer and my next door neighbor had ovarian cancer. Ovarian cancer runs in my family.

5. When the air quality is poor, it is noticeable to me. Several times each year I notice a chemical smell in the air. If I had known the air pollution in the area around my house was so bad, I would not have moved to my house.

6. I maintain an herb garden and my yard, walk my dog twice a day, and frequently walk for exercise. I also enjoy sitting outside on my patio.

7. Although I greatly enjoy spending time outdoors, each time I notice a chemical smell in the air I bring my two cats and my dog indoors and I stay inside as much as possible. My husband also stays inside as much as possible each time he notices the chemical smell.

8. I oppose EPA's rule covering the synthetic organic chemical manufacturing industry because it fails to update outdated technology-based standards requiring control of hazardous air pollution and other types of harmful air pollution. I also oppose the rule because it fails to limit emissions in a way that would reduce excess cancer risks and other health hazards caused by hazardous air polluters to a level that Congress deemed would provide an ample margin of safety to protect public health. Without updated technology-based standards for

hazardous air polluters, I will be exposed to more hazardous air pollution and other harmful air pollution than I would if the standards were updated. Due to the absence of emissions limitations that would reduce excess cancer risks to below one in one million, I will face a higher risk of cancer, as well as an increased risk of other health hazards caused by air pollution.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 9-7-07

Marsha Svatopolsky

Marsha Svatopolsky

CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing **Final Opening Brief of Petitioners Natural Resources Defense Council and Louisiana Environmental Action Network** via First Class Mail to each of the following on this 4th day of March, 2008:

Stephen L. Johnson, Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
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Washington, D.C. 20460

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U.S. Department of Justice
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Washington, DC 20026-3986

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Kent E. Hanson
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Washington, D.C. 20026-3986

Deborah S. Faulkner